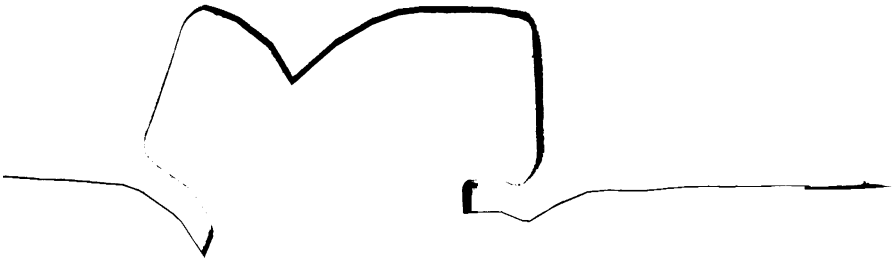
YEC
Upha n



YEC
uphan

Euphemia H. [illegible]

YE

E. H. Thorp —

ELEMENTS

OF

MENTAL PHILOSOPHY,

ABRIDGED AND DESIGNED AS A

TEXT BOOK

FOR

ACADEMIES AND HIGH SCHOOLS.

BY THOMAS C. UPHAM,

PROFESSOR OF MENTAL AND MORAL PHILOSOPHY AND INSTRUCTER OF HEBREW IN BOWDOIN COLLEGE.

Third Edition.

BOSTON:

PUBLISHED BY WILLIAM HYDE, & CO.

MDCCCXXXII.

PRESS OF J. GRIFFIN, BRUNSWICK.

PREFACE.

The present work has been prepared in the hope of promoting a more general acquaintance with an important department of science. As it is designed chiefly for those who are young, and are in a course of education, it lays claim to no other merit, than what might ordinarily be expected in a text-book, founded on the inquiries of many valuable writers. Guided by their researches, it endeavours to give a condensed, but impartial view of Mental Philosophy, so far as its principles are understood at the present time; and the writer has learnt from a number of esteemed instructers of youth, that his design is approved by them. He is by no means insensible to this favourable sentiment; and if the present work should prove to be the means of awakening an increased interest in mental science, he will feel himself amply rewarded for whatever trouble it may have occasioned.

The Philosophy of the Mind has grown up like other sciences from small beginnings. Many propositions, coming too in many instances from able writers, have been thrown aside; truth has been sifted out from the mass of errour, until at last a great number of important principles is ascertained. But while it is exceedingly necessary, that our youth should be made acquainted with these principles, it is impossible, that they should go through with all the complicated discussions, which have been held in respect to them. Many of the books, in which these discussions are contained, have become exceedingly rare; and if they were not so, no small number of students, who are now in the course of as thorough an education as our country affords, would not be able to purchase them. And besides, by placing before the stu-

dent a mass of crude and conflicting statements, his mind becomes perplexed. To be able to resolve such a mass into its elements, and to separate truth from errour, implies an acquaintance with the laws of the intellect, and a degree of mental discipline, which he is not yet supposed to have acquired; and hence, instead of obtaining much important knowledge, he becomes distrustful of every thing.

Now these evils, saying nothing of the loss of time attendant on such a course, are to be remedied in the same way as in other sciences. In other departments of learning, ingenious men discuss points of difficulty; conflicting arguments are accumulated, until the preponderance on one side is such, that the question in debate is considered settled. Others employ themselves in collecting facts, in classifying them, and in deducing general principles; and when all this is done, the important truths of the science, collected from such a variety of sources and suitably arranged and expressed, are laid before the student, in order that he may become acquainted with them. Very seldom any one thinks it advisable, that the pupil, in the course of an education limited to a very few years, should be obliged to attempt an acquaintance with every scientific tract and book, whether of greater or less value. It is neither desirable nor possible, that he should be able to consult all the Memoirs of Institutes and of Royal Societies; and still less to read the multitude of half-formed suggestions, which are either struck out in the momentary heat of debate, or are developed from all quarters in the natural progress of the mind. It belongs rather to professional men and to public instructers, to engage in this minute and laborious examination, and to present those whom they instruct with the results of their inquiries. It may indeed be desirable to give them some knowledge of the history of a science, and to point out such authors as are particularly worthy of being consulted by those, whose inclination and opportunities justify more particular investigations. But this is all, that is either demanded, or can be profitable in the ordinary course of education. And this is what is attempted to be done in the present work.

It has been my desire and endeavour, as was intimated at the beginning of these remarks, to give a concise, but correct view of the prominent principles in Mental Philosophy, so far as they seemed at present to be settled. The statement of

these principles is attended with a perspicuous summary of the facts and arguments, on which they are based; together with occasional remarks on the objections, which have been made from time to time. In selecting facts in confirmation of the principles laid down, I have sought those, which not only had a relation to the point in hand, but which promised a degree of interest for young minds. Simplicity and uniformity of style has been aimed at, although in a few instances the statements of the writers referred to have been admitted with only slight variations, when it was thought they had been peculiarly happy in them. As my sole object was the good of young men, I did not feel at liberty to prejudice the general design, by rejecting the facts, arguments, and in some cases even the expressions of others.

THOMAS C. UPHAM.

BOWDOIN COLLEGE, Maine.

THIRD ABRIDGED EDITION.

Great pains have been taken with this new edition. The more important improvements, contained in the larger work in two volumes, have been introduced into this. Teachers will find it, in some respects, essentially altered from any former impression; and this may occasion a temporary inconvenience, as different editions cannot be used in the same class. But it is hoped they will be willing to overlook this, in consideration of the decided improvements, which they may expect to meet with in various parts of the work. In a treatise embracing such a multiplicity of topics, it it could hardly be expected, that the first attempts would be so successful as to leave nothing for further and more exact inquiry.

NOVEMB. 1832.

CONTENTS.

INTRODUCTION.

PART FIRST.

LAWS OF THE MIND.

PART SECOND.

INTELLECTUAL STATES OF THE MIND.

CLASS FIRST.

INTELLECTUAL STATES OF INTERNAL ORIGIN.

ORIGIN OF KNOWLEDGE IN GENERAL.

CHAP. II—SENSATION AND PERCEPTION.

CHAP. III—THE SENSES OF SMELL AND TASTE.

CHAP. IV—THE SENSE OF HEARING.

CHAP. V—THE SENSE OF TOUCH.

PART THIRD.

SENTIENT STATES OF THE MIND.

CLASS FIRST.

EMOTIONS.

CLASS SECOND,

DESIRES.

CLASS THIRD.

FEELINGS OF OBLIGATION.

MENTAL PHILOSOPHY.

INTRODUCTION.

CHAPTER FIRST.

UTILITY OF MENTAL PHILOSOPHY.

§. 1. *Objects of this science and objections against it.*

MAN is not a simple, but a combined or complex existence, made up of mind and matter. It belongs to mental Philosophy to make inquiries into his mental part, into that characteristic element in his formation, which thinks and combines, which feels and wills, hates and loves. And as mind is higher than matter, a less gross and more excellent existence, it might be supposed, that the study of it would be pursued with the greatest alacrity and delight.

Nor has this supposition been altogether disappointed; the study of the intellect and of the passions has never, in any stage of society, been wholly neglected; and yet some objections have been made to this pursuit, which, although more specious than solid, have lessened the ardour, to which it is entitled.

§. 2. *Its supposed practical inutility.*

Among other objections, not sufficiently weighty to exact an examination at present, it has sometimes been said, and with some degree of plausibility, that Mental Philoso-

phy is practically useless.—In studying this department of science, we are supposed in the erroneous opinion, which has been mentioned, to learn in a scientific form only what we have previously learnt from nature; we acquire nothing new, and the time, therefore, which is occupied in this pursuit, is misspent.

All persons, however ignorant, know what it is, to think, to imagine, to feel, to perceive, to exercise belief. All persons know the fact, without being formally taught it, that memory depends on attention. When asked, why they have forgotten things, which occurred yesterday or last week in their presence, they think it a sufficient answer to say, that they did not attend to them. All classes of men are practically acquainted with the great principle of association. The uneducated groom, who feeds his horses to the sound of the drum and bugle, as a preparatory training for military service, discovers a knowledge of it not less than the philosopher. The vast multitude, with scarcely a single exception, understand the complexity and strength of the passions; the power, and the aids, and the practice of reasoning.

From some facts of this kind, which may safely be admitted to exist to a certain extent, the opinion has arisen of the practical inutility of studying Mental Philosophy as a science.

§. 3. *Its supposed practical inutility answered.*

If, however, such facts as these be admitted to be a valid objection in application to this study, the same objection evidently exists to the study of other sciences, for instance, Natural Philosophy. It is remarked of savages, that they gain an eminence before they throw their missile weapons, in order by the aid of such a position to increase the momentum of what is thrown. They do this without any scientific knowledge of the accelerating force of gravity. The sailor, who has perhaps never seen a mathematical diagram, practically understands, as is evident from the mode in which he handles the ropes of the vessel, the composition and resolution of forces. In a multitude of in-

stances, we act on principles, which are explained and demonstrated in some of the branches of Natural Philosophy. We act on them, while we are altogether ignorant of the science. But no one, it is presumed, will consider this a good excuse for making no philosophical and systematic inquiries into that department of knowledge.

But without contenting ourselves with the answer, which has now been given to the objection, that the study, upon which we are entering, is of no practical profit, some remarks will be made, more directly and positively showing its beneficial results.

§. 4. *Mental Philosophy tends to gratify a reasonable curiosity.*

If it were true, that the practical good results of a prosecution of this science are exceedingly inconsiderable, it might, nevertheless, be properly studied, because a natural and reasonable curiosity is in this way gratified. The botanist examines the seed of a plant and its mode of germination, the root and the qualities by which it is fitted to act as an organ of nutrition and support, the structure of the stem, and the form of the leaves. The mineralogist inquires into the properties, the constituent parts, and the relations of the various mineral masses, which enter into the formation of the earth's surface. And whatever opinion may exist as to the amount of practical benefit resulting from inquiries into these departments of science, they are justly considered as exceedingly commendable, and as suitable to the inquisitive turn of an intellectual being. In other words, the constitution of the mind itself, which in its very nature is restless and inquisitive, is regarded as a pledge of the propriety of such inquiries, independently of their subserviency to the indirect increase of human happiness.

But it is certainly not too much to say, that the soul of man presents a nobler subject of examination, than the inanimate masses of matter beneath his feet, or the flowers, that open and bloom around him. In whatever points we may hereafter compare them, we shall have frequent occasion to observe, that spirit possesses the preeminence

over that, which is immaterial. Matter and mind are utterly different in their nature: although in making the remark here, we anticipate the views, by which it is authorized. Our experience teaches us, that the former is compounded and separable into parts; but we know the latter to be simple and inseparable. Being inseparable, it is not subject to the change of dissolution, but continues unaltered in its nature amid the rapid decays of material existence. And what is a further mark of its superior claims on our attention, the mind is subject to a law of increase; it is not stationary, but is always advancing, always strengthening its susceptibilities of knowledge.

§. 5. *Further grounds for this view.*

The remark last made is worthy of particular consideration.—Look at men in the beginning of his existence. The thoughts and feelings of the infant mind are few indeed, but it is able, in the creative expansion of its powers, to multiply them both in their simple and complex forms, to an immeasurable extent.—In various ways does this appear; in every thing, which admits of the application of mind; in the arts, sciences, and social order.

Writers say, that man is born in society, and it is true, that he is so. But what is his situation in the introductory period of his life! If he be an object of love, he is also an object of solicitude and pity; he is utterly under the direction of another, unable at first to guide his own footsteps. But in a few years, such has been the growth of his intellect, that he, who but yesterday could not govern himself, tomorrow enacts the constitution and laws of empires; he, who but yesterday knew no social principle but that of simple dependence on his mother, tomorrow comprehends the philosophy of Montesquieu, and has become the guide and legislator of the world.

Nor is this growth of mind, this wonderful expansion of the intellect limited to any one class of objects to the exclusion of others.—Mark the childhood of man in his earliest inquiries into nature. At first he is filled with astonishment at beholding the clustering beams of light, that

are reflected from a piece of metal. Pleased but not satisfied, as the mind acquires strength, he traces the direction and the rapidity of its progress from planet to planet, till he finds its source in the sun, whose form, and magnitude, and revolution he is able to estimate. At first, too feeble of judgment for the simple operation of combining syllables into words, he shortly reads the Principia of Newton, and interprets from the evapescent aspects and facts of nature the hidden and immutable laws, by which she is governed.——Such being the nature of the human mind, so vastly capacious in its progress, though weak indeed in its beginning, it is, in itself considered, a most rational and worthy object of examination.

§. 6. *Mental Philosophy teaches us where to limit our inquiries.*

But there is another view of the mind, necessary to be taken, which is somewhat different from the foregoing, although equally true.—That the human mind possesses a natural energy and is rapidly progressive is certain; but it is not less so, that it has its boundaries. And here we find another of the good results of a knowledge of Mental Philosophy, that we are taught by it to limit our inquiries to those subjects, to the investigation of which our capacities are equal and are adapted.

The Supreme Being is an all pervading mind, a principle of life, that has an existence in all places and in all space, and whose intelligence is like his omnipresence, acquainted with all things. But man, his creature, is made with an inferiour capacity; he knows only in part, and it is but reasonable to suppose, that there are many things, which he will never be able to know. But, although it be justly admitted, that man is subordinate to the Supreme Being and is infinitely inferiour to Him, his Maker has kindly given him aspirations after knowledge, with the power of satisfying, in some measure and under certain limitations, such aspirations. If, therefore, man be a being, formed to know, and there be, moreover, certain restrictions, placed upon the capacity of knowledge, it is highly

important to ascertain the limitations, whatever they may be, which are imposed. Nor is this always an easy thing to be determined. There is oftentimes a difficulty in ascertaining precisely the boundary, which runs between the possibility and the impossibility of knowledge, but whenever it is ascertained, there is an indirect increase of mental ability by means of the withdrawment of the mind from unprofitable pursuits, in which there is an expense of effort without any remuneration.

The necessity of ascertaining what things come within the reach of our powers and what do not, was a thought which laid the foundation of Mr. Locke's Essay on the Human Understanding.

§. 7. *Remarks of Mr. Locke on this point.*

"Were it fit to trouble thee with the history of this Essay (he remarks in the Epistle to the reader) I should tell thee, that five or six friends meeting at my chamber and discoursing on a subject very remote from this, found themselves quickly at a stand by the difficulties, that arose on every side. After we had awhile puzzled ourselves without coming any nearer a resolution of those doubts, which perplexed us, it came into my thoughts, that we took a wrong course, and that before we set ourselves upon inquiries of that nature, it was necessary to examine our own abilities, and see what objects our understandings were or were not fitted to deal with. This I proposed to the company, who all readily assented, and thereupon it was agreed, that this should be our first inquiry."

Such were the sentiments on this subject of a man, who has probably contributed more largely than any other individual to help us to the correct understanding of the mind; and whose writings, such is their singular originality and acuteness, can hardly be too strongly recommended for perusal.

§. 8. *Helps us in the correction of mental errours.*

A third advantage, resulting from the study of the Philosophy of the Mind, is, that it teaches us in many cases

to correct whatever deficiencies or errours may exist in our mental constitution.

In our present state of imperfection, while we are found to experience various kinds of bodily evils, we are not exempt from those of the mind; and we know not, that it can any more excite surprise, that some people exhibit mental distortions, than it can, that we daily see not only the healthy and the well-formed, but the maimed, the halt, and the blind. If then it be asked, how are these various mental defects to be remedied, the answer is obvious, that we should act in regard to the mind as we do in promoting the restoration of the body; we should commit the business of ascertaining a remedy to those, who are in some good degree acquainted with the subject and with the nature of the disease. A physician, altogether ignorant of the anatomy and physiology of the human system, would be poorly fitted to restore a fractured limb, or subdue the ravages of a fever. But if knowledge be necessary, in order to heal the weakness of the body and restore it to its proper soundness and beauty, it is not less important in the restoration of analogous evils in the mental constitution.

In looking round to see, whose minds are disordered, and whose are in a sound and healthy condition, we notice, for example, that some persons are troubled with a very weak memory. We have a very candid confession on this point in the writings of Montaigne. He informs us, that he did not trust to his memory. "I am forced (says he) to call my servants by the names of their employments, or of the countries where they were born, for I can hardly remember their proper names; and if I should live long, I question whether I should remember my own name." It appears, however, from his acquaintance with the principles of the ancient philosophers that he had not much reason to complain, except of his own inattention to this valuable mental susceptibility. He remembered principles; he could keep in recollection the outlines of the sciences, but could not so well remember insulated facts, especially if they related to the occurrences of common

life. This peculiarity in the operations of the memory is not unfrequently found among men of letters, especially if they possess a vivid imagination. But it must be considered a mental defect; one, which it is not only important to understand, but to try to remedy.

Montaigné is a striking instance of failure in one of the varieties of memory, and others fail equally in the power of reasoning, that is, in forming judgments or conclusions by combining together a number of consecutive propositions. And this happens from a variety of causes, as from weakness of attention, or the influence of prejudices, or an ignorance of the nature and sources of evidence, or from other causes, which may be guarded against and controlled. In other cases the mind is thrown into confusion in consequence of such exceeding vividness in the conceptions, as to lead one to mistake the mere objects of thought for real external objects. And again we have the still more formidable evils of idiocy in its various forms of origin, and of partial and total insanity.

Since then it must be admitted, that there are diseases and distortions of the mind no less than of the body, and that we cannot expect a restoration from those evils without an intimate acquaintance with the state and tendencies of our intellectual and sentient powers, such an acquaintance becomes exceedingly desirable.

§. 9. *Is a help to those, who have the charge of early education.*

This study, in the fourth place, furnishes many very valuable hints to those, who have the charge of early education. It is well known that children and youth adopt almost implicitly the manners and opinions of those, under whom they happen in Providence to be placed, or with whom they much associate, whether they be parents, instructers, or others.

Let it, therefore, be remembered, that passions both good and evil may then rise up and gain strength, which it will afterwards be found difficult to subdue. Intellectual operations may at that period be guided and invigora-

ted, which, if then neglected, can never be called forth to any effective purpose in after life. Associations and habits of various kinds may then be formed, which will defy all subsequent attempts at a removal, and will follow the subjects of them down to the grave. In a word, the soul may be trained, in no small degree, either to truth or falsehood, to virtue or vice, to activity or sluggishness, to glory or infamy.

When we take these things into view, and when we further recollect the frequency of characteristic, if not original differences in intellectual power and inclination, no one certainly can be considered properly qualified for the great undertaking of a teacher of youth, who has not formed a systematic and philosophic acquaintance with the principles of the mind.

§. 10. *Has a connection with other departments of science.*

It is to be considered in the fifth place, that this department of science has an intimate connection with others, which are of great importance; and this connection may be regarded as increasing the urgency of attending to it.

For instance, Mental philosophy has an intimate connection with Moral. In the latter science we bring under consideration injuries, benefits, the nature and obligation of contracts, and the various duties of men; but such inquiries would be exceedingly fruitless without a thorough acquaintance with the emotions and passions, and with other modifications, both simple and complex, of the mental principle.

The philosophy of the mind has also a close connection with the most important applications of Criticism and Taste. It would not be possible to give any rational account of the excellencies or defects of a poem, painting, edifice, or other work of art, without a knowledge of it. For, although we often call such works beautiful and sublime, it is certain, that they cannot possess the qualities of beauty or sublimity, independently of our mental frame, and we never apply those epithets to them, except it be with reference to certain feelings excited within us.

Again, Mental philosophy is closely connected with the science and practice of Oratory. We sometimes hear the science of the mind designated as the philosophy of human nature, and nothing certainly is more common than the remark, that a knowledge of human nature is essential to the orator. With how much greater directness and strength he applies his powers of reasoning, when he understands the principles, on which the mind operates in every reasoning process! With how much greater confidence he attacks prejudices, and rouses or allays the passions, when he has thoroughly meditated the passions, and the various influences, by which our judgments are biassed!

It will be found also on examination, that the philosophy of mind has a real relation, either direct or indirect, to various other departments of knowledge. Indeed, so far as it examines primary propositions, and the grounds and instruments of belief, it may justly be considered as laying the foundation of all sciences and knowledge whatever.

§. 11. *Mental science is a guide in our intercourse with men.*

And let it be further noticed, in connection with this subject, that our intercourse with men, in the ordinary concerns and enjoyments of life, is truly and properly an intercourse with minds. In order to render this intercourse agreeable and profitable, it is necessary to be acquainted with the laws of the mind. It is undoubtedly the duty of every man, to increase, as far as lays in his power, the sum of human happiness; but without such acquaintance he will often touch, unadvisedly some train of thought, some secret feeling, some casual connection, that will produce deep unhappiness. But if he combine with a benevolent disposition a suitable knowledge of our mental nature, his touch, like that of the skilful musician, will extract from those, with whom he mingles in the intercourse of life, the concord of just thoughts and kindly feelings, which is the most pleasing of all earthly harmonies.

But there is another point, on which men have been most unjust and cruel to each other, and in respect to which they will find in mental philosophy a clear intimation of their errour, and an implied and stern rebuke of their injustice; we have reference to the hostility of those, who happen to embrace different opinions. Many unfortunate men have been exiled and out-cast from society; many have been thrown into dungeons; many have been broken upon the rack; many have died by the fire and famine and the sword; merely because they did not believe as those, who possessed the power thus to oppress them. But the philosophy of mind teaches us, that belief has its laws; that there is no necessary connection between suffering and a change of opinion; and it whispers in the ears of those, who have the wisdom to understand it, that the only rebukes should be evidence; the only engines of torture, arguments; and the only persecution and warfare, the zealous communication of knowledge.

§. 12. *Illustrates the nature and wisdom of the Creator.*

But we leave these and all other considerations, tending to show the utility of the science of the human mind, with the single reflection further, that it helps to illustrate the nature and wisdom of the Infinite Mind.

I.—It throws light on the nature of the Supreme Being. All those ideas, which we form of God, are only new applications and extensions of certain ideas, which we previously form in respect to ourselves. The soul, approaching in its nature nearer to him than any thing else, which is the direct subject of our knowledge, is, in some sort, the medium, by which we mount up, and are able to form true conceptions of the nature of the universal Author. Hence, in studying mind even on the limited theatre of humanity we are indirectly studying the Supreme Being, since God is the original, indispensable, and all-pervading mind, and no analogy even in the slightest degree can be pointed out between his nature, and that of any thing else on earth. Accordingly we find universally in nations, where the intellect is degraded, God is degraded

also; where there are no powers of abstraction, every thing assumes a massive and material form; where there is no thorough contemplation of the divinity within, there is no true knowledge of the Divinity without. And these degraded men are so in love with their grovelling and unintelligent conceptions, that they will show you the spirituality of the Omniscience, reduced to a visible form, and cased up in the broidered work of Egypt, the gold of Tyre, and the feathers of the South Sea Islands.

II. The knowledge of the human mind is not only the basis of true conceptions of the nature of the Divine Mind, but it affords also the most striking exemplification of some of his attributes, particularly his wisdom.

We are frequently referred in theological writings to the works of creation, as a proof of the Creator's wisdom; and the remark has been made, not without reason, that the "*stars teach as well as shine.*" But of all those created things, which come within the reach of our direct examination, the human mind is that principle, which evinces the most wonderful construction, which discloses the most astonishing movements. There is much to excite our admiration of the Divine foresight in the harmonious movements of the planetary orbs, in the rapidity of light, in the process of vegetation; but still greater cause for it in the principle of thought, in the inexpressible quickness of its operations, in the harmony of its laws, and in the greatness of its researches. How striking are the powers of that intellect, which, although it have a local habitation, is able to look out from the place of its immediate residence, to pursue its researches among those remote worlds, which journey in the vault of heaven, and to converse both with the ages past and to come!

It ought not to be expected that we should be intimately acquainted with a principle possessing such striking powers, without some reverential feelings towards Him, who is the author of it.

§. 13. *Of the mental efforts necessary in this study.*

In concluding these remarks on the utility of the Phi-

losophy of the Mind, it ought not to be concealed, that our early intellectual habits present an obstacle to the easy and ready prosecution of it. We are so formed, that we naturally give our attention first to external things. The varieties of color and sound, the pleasures of taste and touch are continually giving us new intimations, and drawing the soul incessantly out of itself to the contemplation of the exteriour causes of the perceptions and emotions, by which it is agitated. Hence, when we are called to look within, and as the Arabians sometimes say, '*to shut the windows, in order that the house may be light,*' we find it to be a process, to which we are unaccustomed, and, therefore, difficult.

Although the direct mental efforts be not greater in this, than in some other departments of science, it is, in consequence of the circumstance just mentioned, exceedingly painful to some, and certainly requires patience and resolution in all. And perhaps this is one cause of the unfavorable reception, which this department of knowledge has often met with.

But the advantages attending it are so numerous, it is to be hoped, they will overcome any disinclination to the necessary mental exertion. The fruits of the earth are purchased by the sweat of the brow, and it has never been ordered that the reverse of this shall take place in the matters of knowledge, and that the fruits of science shall be reaped by the hands of idleness. No man has ever become learned without toil; and let it be remembered, if there be many obstacles in the acquisition of any particular science, that he, who overcomes a multiplication of difficulties, deserves greater honour than he, who contends only with a few.

CHAPTER SECOND.

IMPLIED OR PRIMARY TRUTHS.

§. 14. *Importance of certain preliminary statements in mental philosophy.*

It is often highly important, in the investigation of a department of science, to state, at the commencement of such investigation, what things are to be considered as preliminary and taken for granted, and what are not. If this precaution had always been observed, which, where there is any room for mistake or misapprehension, seems so reasonable, many useless disputes would have been avoided, and the paths to knowledge would have been rendered more direct and easy, instead of being prolonged and perplexed.

It is impossible to proceed with inquiries in the science of MENTAL PHILOSOPHY, as it will be found to be in almost every other, without a proper understanding of those fundamental principles, which are necessarily involved in what follows. And it will, accordingly, be the object of this chapter to endeavour to ascertain them; keeping in mind always, that much circumspection is requisite, lest there should be any unnecessary assumptions. The elementary truths, which we have reference to, are few in number, and nothing at least shall be assumed, merely to avoid the trouble of investigation.

§. 15. *Nature of such preliminary statements.*

Those preliminary principles, which may be found necessary to be admitted as the antecedents and condi-

tions of all subsequent inquiries, will be called, for the sake of distinction and convenience, PRIMARY TRUTHS.—But what are these? Or how do we know them?

According to the view of this subject, taken by Buffier, who has expressly written upon it, and is approved in what he says by Stewart and other metaphysical writers, they are such, and such only, as can neither be proved, nor refuted by other propositions of greater perspicuity. And this is not only a succinct, but a satisfactory account of them, since, if there were other propositions, into which they could be resolved, and by means of which they could be made clearer, then they could no longer be regarded as primary, but those other clearer propositions would have that character.

But it may be asked again, are there any propositions of this kind? Are there any so clear, that the great instrument of human reasoning cannot render them more perspicuous? Can there not be a complete action of the human mind in all its parts without the laying down of any antecedent truths whatever, as auxiliaries in its efforts after knowledge?—The answer to such questions, however formidable they may at first appear, is not far off; it is furnished by the nature of reasoning, and by every day's experience. Every man, who investigates at all, often experiences doubts in his inquiries. He accordingly endeavours to render the propositions, which are of this character, clearer by argument. He goes on from step to step, from one proposition to another; but, unless he at last finds some truth utterly too clear to be rendered more so by reasoning, he must evidently proceed, adding deduction to deduction without end. Reasoning is in fact a succession of relations; but there can be no feeling of relations, where there is but one object of contemplation; something, therefore, must, from the nature of the case be assumed.

§. 16. *Of the name or designation given them.*

The mode of expression, which is employed to indicate the propositions, which are under consideration, is not

novel; but is made use of by a number of judicious writers. They are called PRIMARY TRUTHS; and without doubt the phraseology is good. Such propositions are termed, in the first place, TRUTHS, since they are forced upon us, as it were, by our very constitution. They exist as surely as the mind exists, where they have their birth-place; they as certainly and as strongly control the convictions of men, as the demonstrations of geometry; and not of one man merely, or any particular set of men, but of all mankind; for the few, who pretend to reject them in speculation, constantly retract and deny such rejection of them in their practice. And yet they are not the result of calculation; they are not the deductions of reasoning; but rather the natural and unfailing concomitants of humanity.

With sufficient reason also, are the propositions in question called PRIMARY; because, as would seem to follow from the very definition of them, they are the propositions, into which all reasoning ultimately resolves itself, and are necessarily involved and implied in the various investigations, of which the mind is capable, whether they relate to the great subject before us, or to others. As has been remarked, there cannot possibly be a process of reasoning, without some first priciple or admitted truth, from which to start.

§. 17. *Primary truth of personal existence.*

The PRIMARY TRUTH, which we are naturally led to consider first, is that of the reality and certainty of our personal existence. The proposition, *that we exist*, is a sort of corner stone to every thing else; the foundation of our knowledge; the place and the basis, from which the edifice must rise. This fundamental truth we admit.

The celebrated Des Cartes, as if he could by a mere volition suspend the unalterable dictates of nature, formed the singular resolution, not to believe his own existence, until he could prove it. He seemed to forget that there are grounds of belief, antecedent to reasoning, and equally

authoritative.—He accordingly reasoned thus; *cogito, ergo sum*, I think, therefore, I exist.

Buffier makes the remark in respect to such sceptical persons, that, if they doubt of every thing, it must still remain true, that they exist, as they cannot even doubt without existing. At any rate Des Cartes was as near the truth, when he laid down the premises, as when he drew the conclusion. His argument, however conclusive he might deem it, evidently involves a PETITIO PRINCIPII or begging of the question. The Latin word COGITO, which is not only a verb but includes the pronoun of the first person, and undeniably embraces both subject and predicate, is equivalent, to make the least of it, to the proposition, *I am a thinking being*; and ERGO SUM may be literally interpreted, *therefore, I am in being*. His premises had already implied, that he existed as a thinking being, and it is these very premises, which he employs in proof of his existence. The acuteness, which has been generally, and without doubt justly attributed to Des Cartes, evidently failed him in this instance. His argument was unsuccessful, and no one, who has attempted to prove the same point, has succeeded any better.

This being the case, it is necessary to take ground altogether different from that, which has been chosen by Des Cartes and his followers, and not to risk the defence of a principle so important, where it clearly can never be sustained. We regard, therefore, the proposition, THAT WE EXIST, a primary truth; in other words, it is a proposition, antecedent to reasoning, but which, notwithstanding, fully and perfectly secures our belief. Nothing, which comes within the reach of the human mind, is more clearly defined to its perception, more thoroughly controlling and operative, and more raised above cavils and scepticism, whether rational or irrational, than this.

§. 18. *Occasions of the origin of the idea or belief of personal existence.*

It remains, however, a distinct subject of inquiry, Under what circumstances this elementary belief arises?—

And in answer to this inquiry we may say with abundant confidence, if it be not the earliest, it is at least among the earliest notions, which the mind is capable of forming. A kind Providence has not conceded to a feeling, so essential to our whole mental history, a dilatory, and late appearance. But that same providence has given a place as well as a time, an occasion as well as a period of its formation; and although it may be impossible for us ever to ascertain that occasion with certainty, we may at least conjecture.

We look, therefore, in our meditations on this topic, at man in his first existence. We see him called forth from a state, where there was neither form nor knowledge, neither light nor motion, neither mind nor matter; endowed with such capabilities of thought and action, both internal and external, as his Creator saw fit to give. Thus brought into being, and thus fitted up for his destined sphere, we will suppose, that some external object is for the first time presented to the senses. The result of this is, that there is an impression made on the senses; and then at once there is a change in the mind, a new thought, a new feeling. Although, as already suggested, there is room for different conjectures here, there is much reason to believe, that this is the true occasion of the origin of the belief in question.* The first internal experience, the earliest thought or feeling is immediately followed by the notion of personal or self existence, as the subject of this new thought or feeling. And this idea or conviction of

* The view, which is here given, is the same that is proposed by Reid and Stewart, whose opinions on any point of mental philosophy are entitled to great weight. The latter writer informs us, in the Introduction to his Philosophy of the Human mind, that every man is impressed with an irresistible conviction, that all his sensations, thoughts, and feelings belong to one and the same being, which he calls *himself*. And again in Chapter first of the same Work, he gives us to understand, that a person, having a particular sensation for the first time, acquires the knowledge of two facts at once; that of the existence of the sensation, and that of his own existence as a sentient being.

personal existence, which arises at this very early period, is continually suggested and confirmed in the course of the successive duties, and enjoyments, and sufferings of life.

Such has commonly been supposed to be the origin of the belief in question. We may as well suppose it to come into being in connection with the first act of the mind, as with any subsequent act; although with less distinctness and strength, than afterwards. But whether this account of the origin of the notion of our personal existence be the true one or not, we may still hold to the fact of the belief itself, as something beyond doubt. We may also regard it as necessarily resulting from our mental constitution, and as wholly inseparable from our being.

Malebranche in his Search after Truth speaks much in commendation of what he has termed the spirit of doubting. But then he bestows this commendation with such limitations as will prevent those evils, which result from too freely giving up to a sceptical spirit.

"To doubt (says he) with judgment and reason, is not so small a thing as people imagine, for here it may be said, that there's a great difference between doubting and doubting. We doubt through passion and brutality, through blindness and malice, and, lastly, through fancy, and only because we would doubt. But we doubt also with prudence and caution, with wisdom and penetration of mind. Academics and atheists doubt upon the first grounds, true philosophers on the second. The first is a doubt of darkness, which does not conduct us into the light, but always removes us from it." (B. I. ch. 20.)

We may remark in conformity with this distinction of Malebranche, that the doubting of those over-scrupulous inquirers, who demand a formal proof of their own existence, is of that kind, to which he so justly objects. Scepticism on that subject is truly a doubt of darkness, which does not conduct us into the light, but always removes us from it.

§. 19. *Primary truth of personal identity.*

The second of those preliminary truths, which we

term primary, is the proposition of our Personal Identity. —If the consideration of our personal existence naturally come first in the order of time, that of the truth now before us is not secondary in point of importance. We cannot dispense with either, without unsettling the grounds of inquiry and belief, and barring the access to all knowledge whatever.

IDENTITY is synonymous with sameness, and is the name of a simple state of mind. Although, therefore, its meaning is as clear as that of other simple ideas, and every body is supposed to understand it, it is not susceptible of definition. The term is applied to various objects, and among others to men. The word PERSONAL implies Self, and personal identity is, therefore, the identity of ourselves. But the term *self* is complex, embracing both mind and matter, and hence we are led to consider the distinct notions of mental and bodily identity.

I. MENTAL IDENTITY ;—By this phrase we express the continuance and oneness of the thinking principle merely. The soul of man is truly an unit. It is not like matter separable into parts ; no one being ever conscious of a want of oneness in thought and feeling. It may bring, from time to time, new susceptibilities into action ; but its essence is unchangeable. That, which constitutes it a thinking and sentient principle, in distinction from that, which is unthinking and insentient, never deserts it, never ceases to exist, never becomes other than what it originally was.

II. BODILY IDENTITY ;—By these expressions we mean the sameness of the bodily shape and organization. This is the only meaning we can attach to them, since the materials, which compose our bodily systems, are constantly changing. The body is not an unit in the same sense the soul is. It was a saying of Seneca, that no man bathes twice in the same river ; and still we call it the same, although the water within its banks is constantly passing away. And in like manner we ascribe identity to the human body, although it is subject to constant changes, mean-

ing by the expressions, as just remarked, merely the sameness of shape and organization.

III. PERSONAL IDENTITY;—This form of expression is more general than either of those, which have been mentioned. It has reference to both mind and matter, as we find them combined together in that complex existence, which we term man or person. It is equivalent to what is conveyed by the two phrases of mental identity, and bodily identity. But it is evident we cannot easily separate the two, when speaking of men. And accordingly, when it is said, that any one is conscious of, knows, or has a certainty of his personal identity, it is meant to be asserted, that he is conscious of having formerly possessed the powers of an organized, animated, and rational being, and that he still possesses those powers. He knows, that he is a human being now, and that he was a human being yesterday, or last week, or last year.—There is no mystery in this. It is so plain, no one is likely to misunderstand it, although we admit our inability to give a definition of identity.

§. 20. *Reasons for regarding this a primary truth.*

If personal identity be a primary truth, it is antecedent to argument, and is independent of it.—What grounds are there, then, for regarding it as such?

In the FIRST place, the mere fact, that it is constantly implied in those conclusions, which we form in respect to the future from the past, and universally in our daily actions, is of itself a decisive reason for reckoning it among the original and essential intimations of the human intellect. On any other hypothesis we are quite unable to account for that practical recognition of it in the pursuits of men, which is at once so early, so evident, and so universal.

The farmer, for instance, who looks abroad on his cultivated fields, knows that he is the same person, who twenty years before entered the forest with an axe on his shoulder, and felled the first tree. The aged soldier, who recounts at his fireside the battles of his youth, never once

doubts that he was himself the witness of those sanguinary scenes, which he delights to relate. It is altogether useless to attempt either to disprove or to confirm to them a proposition which they believe and know, not from the testimony of others or from reasoning, but from the interiour and authoritative suggestion of their very nature; and which, it is sufficiently evident, can never be eradicated from their belief and knowledge, until that nature is changed.

A SECOND circumstance in favour of regarding the notion of personal identity, as an admitted or primary truth, is, that men cannot prove it by argument if they would; and if they do not take it for granted, must forever be without it. The propriety of this remark will appear on examination.——There evidently can be no argument, properly so called, unless there be a succession of distinct propositions. From such a succession of propositions, no conclusion can be drawn by any one, unless he be willing to trust to the evidence of memory. But memory involves a notion of the time past, and whoever admits, that he has the power of memory, in however small a degree, virtually admits, that he has existed the same at some former period, as at present.

The considerations, which we have now particularly in view, and which are greatly worthy of attention in connection with the principle under examination, may with a little variation of terms be stated thus.

Remembrance, without the admission of our personal identity, is clearly an impossibility. But there can be no process of reasoning without memory. This is evident, because arguments are made up of propositions, which are successive to each other, not only in order, but in point of time. It follows, then, that there can be no argument whatever, or on any subject, without the admission of our identity, as a point from which to start. What then will it avail to attempt to reason either for or against the views, which are here maintained, since in every argument which is employed, there is necessarily an admission of the very thing, which is the subject of inquiry.

§. 21. *Of the existence of matter.*

In assuming the truth of self existence and of personal identity, it will be observed, that there has necessarily been an admission of the existence both of mind and matter. As both are employed in the formation or constitution of man in his present state, it is not easy to admit the existence of one, and deny that of the other. We naturally and necessarily think of ourselves not as mind only, but as material.

And accordingly, in whatever follows, the true and actual existence of both is nowhere doubted. But this admission, it should be added, does not preclude inquiries hereafter into the grounds of our belief in both cases. The evidence of consciousness and of the senses in particular will afford occasion for such inquiries.

Evidently some elementary principles must be granted; otherwise we can never advance. But when we have once started, and have made progress, we may then return; examine, under new points of view, the successive steps, which have been taken; and inspect and try the soundness of those primary propositions at the foundation of the whole.

§. 22. *There are original and authoritative grounds of belief.*

Supposing men actually to exist, and to be conscious of the continuance and sameness of their existence, we are next to enter into the interiour of their constitution, and to inquire after such elements of intelligence, and action, as are to be found there. The next proposition, therefore, which is to be laid down as fundamental and as preliminary to all reasoning, is, that there are in men CERTAIN ORIGINAL AND AUTHORITATIVE GROUNDS OF BELIEF.

Nothing is better known, than that there is a certain state of the mind, which is expressed by the term, BELIEF. As we find all men acting in reference to it, it is not necessary to enter into any verbal explanation. Nor would it be possible by such explanation to increase the clearness

of that notion, which every one is already supposed to entertain.——Of this belief, we take it for granted, and hold it to be in the strictest sense true, that there are original and authoritative grounds or sources; meaning by the term *original*, that these grounds or sources are involved in the nature of the mind itself, and meaning by the term, *authoritative*, that this belief is not a mere matter of chance or choice, but naturally and necessarily results from our mental constitution, and is binding upon us.

Sometimes we can trace the state of the mind, which we term belief, to an affection of the senses; sometimes to consciousness, sometimes to that quick, internal perception, which is termed intuition, and at others to human testimony. In all these cases, however, the explanation, which we attempt to give, is limited to a statement of the circumstances, in which the belief arises. But the fact, that belief arises under these circumstances, is ultimate, is a primary law; and being such, it no more admits of explanation, than does the mere feeling itself.——And further, this belief may exist as really, and may control us as strongly, when we are unable to give a particular and an accurate account of the circumstances, in which it may arise, as at other times. We find ourselves continually compelled to act upon it, when the only possible answer we can give, is that we are human beings, or that we believe, because we find it impossible to do otherwise.

Many writers have clearly seen, and defended the necessity of the assumption, which has now been made. Mr. Stewart among others has expressed the opinion, (Hist. Disser. Pt. I. §. II,) that there is involved in every appeal to the intellectual powers in proof of their own credibility, the sophism of reasoning in a circle or petitio principii; and expressly adds, that, unless this credibility be assumed as unquestionable, the further exercise of human reason is altogether nugatory.

§. 23. *Primary truths having relation to the reasoning power.*

Man may be sure of the fact of his existence and of its

permanency; he may be possessed of grounds of belief to a certain extent, such as have been mentioned; and still we may suppose him incapable of reasoning. His knowledge would be greatly limited, it is true, without that noble faculty, but he would know something; his conciousness would teach him his own existence; his senses convey to him intimations of external origin; the testimony of others furnish various facts, that had come within their observation. But happily man is not limited to the scanty knowledge, which would come in by these sources alone; he can compare as well as experience; and can deduce conclusions.

But there is this worthy of notice, that the reasoning power, although it exists in man, and is a source of belief and a foundation of knowledge, is necessarily built upon principles, which are either known or assumed.—This is seen in the most common and ordinary cases of the exercise of this susceptibility. And it will be found also on examination, that one assumption may be resolved into another, and again into another, until we arrive at certain ultimate truths, which are at the foundation of all reasoning whatever. It is important, therefore, to inquire, what general assumptions, having particular reference to the reasoning power and absolutely essential to its action, are to be made.—And these will be found to be two in number; one having special relation to the past, and the other to the future.

§. 24. *No beginning or change of existence without a cause.*

The one, which has a relation to the past, and is the foundation of all reasonings, having a reference to any period antecedent to the present moment, may be stated as follows; that there is no beginning or change of existence without a cause.—This principle, like others which have been mentioned, we may well suppose to be universally admitted. When any new event takes place, men at once inquire the cause; as if it could not possibly have happened without some effective antecedent.

And such being the general and unwavering reception

of the principle before us, it would seem to follow clearly, that there are grounds for it in the human constitution. A reliance on any principle whatever, so firm and general as is here exhibited, is not likely to be accidental. And when we inquire what these grounds are, we shall not fail to come to the conclusion, that the proposition in question is supported by an original intimation or feeling, which is utterly inseparable from our mental nature, and which is made known to us by consciousness alone.

But some will ask, Is it certain, that we cannot arrive at this truth by a process of reasoning?—And in reference to this inquiry, we see no ground for dissenting from the following remarks of Dr. Reid, which will appear the better founded, the more they are examined. Speaking on this subject, he says, "I am afraid, we shall find the proof by direct reasoning extremely difficult, if not altogether impossible. I know of only three or four arguments, that have been urged by philosophers, in the way of abstract reasoning, to prove, that things, which begin to exist, must have a cause. One is offered by Mr. Hobbes, another by Dr. Samuel Clarke, another by Mr. Locke. Mr. Hume in his Treatise of Human Nature has examined them all; and, in my opinion, has shown, that they take for granted the thing to be proved; a kind of false reasoning, which men are very apt to fall into, when they attempt to prove what is self-evident."*

The feeling or belief, therefore, which is implied in the proposition, that there is no beginning or change of existence without a cause, is an original one, directly resulting from our nature. Still it is in our power to give some account of the circumstances, in which it arises.

§. 25. *Occasions of the origin of the primary truth of effects and causes.*

The mind embraces the elementary truth, which we are considering, at a very early period. Looking round upon nature, which we are led to do more or less from the commencement of our being, we find every thing in mo-

*Reid's Intellectual Powers, Essay VI.

tion. Non-existence is converted into life; and new forms are imparted to what existed before. The human mind, which is essentially active and curious, constantly contemplates the various phenomena, which come under its notice; observing not only the events and appearances themselves, but their order in point of time, their succession. And it is led in this way to form the belief, (not by deduction but from its own active nature,) that every new existence and every change of existence are preceded by something, without which they could not have happened.

Undoubtedly the notion, as in many other cases, is comparatively weak at first, but it rapidly acquires unalterable growth and strength; so much so that the mind applies it without hesitation to every act, to every event, and to every finite being. And thus a foundation is laid for numberless conclusions, having a relation to whatever has happened in time past. It is true, that the verbal proposition, by which our belief in this case is expressed, is not always, nor even generally brought forward and stated in our reasonings on the past, but it is always implied.

This primary truth is an exceedingly important one. By its aid the human mind retains a control over the ages that are gone, and subordinates them to its own purposes. It is susceptible in particular of a moral and religious application. Let this great principle be given us, and we are able to track the succession of sequences upward, advancing from one step to another, until we find all things meeting together in one self-existent and unchangeable head and fountain of being. But there it stops. The principle will not apply to God, since He differs from every thing else, which is the object of thought, in being an existence equally without change and without beginning.

§. 26. *Matter and mind have uniform and fixed laws.*

It is necessary to assume also particularly in connection with the reasoning power, that matter and mind have uniform and permanent laws.

This assumption, as well as the preceding, is accordant

with the common belief of mankind. All men believe, that the setting sun will ariseagain at the appointed hour; that the decaying plants of autumn will revive in spring, that the tides of ocean will continue to heave as in times past, and the streams and rivers to flow in their courses. If they doubted, they would not live and act, as they are now seen to do.

This belief in the uniformity and permanency of the laws of nature does not arise at once; but has its birth at first in some particular instance; then in others, till it becomes of universal application. In the first instance the feeling in question, which we express in various ways by the terms, anticipation, faith, expectation, belief, and the like, is weak and vacillating; but it gradually acquires strength and distinctness. And yet this feeling, so important in its applications, is the pure work of nature; it is not taught men, but is produced within them; the necessary and infallible product and growth of our mental being; a sort of unalienable gift of the Almighty to every man, woman, and child; arising in the soul with as much certainty and as little mystery as the notions, expressed by the words, power, wisdom, truth, order, or other elementary states of the mind. It is true, it is an expectation or belief, directed to a particualr object, and, therefore, is not easily susceptible of being expressed by a single term, as in the case of the ideas just referred to; but the circumstance of its being expressed by a circumlocution does not render the feeling itself less distinct or real than others.—As, therefore, the strong faith, which men entertain, in the continuance of the laws of creation, is the natural and decisive offspring of that mental constitution, which God has given us, there is good ground for assuming the truth of that, to which this faith relates, and to regard it as a principle in future inquiries, that matter and mind are governed by uniform laws.

It may be further added, that it is not necessary to call the belief, which is at the foundation of this assumption, either an intuitive perception or an instinct, as some have done, but merely a thought, an idea, a state of the mind;

since the only difference between this, and expectation or belief in other cases, results from the nature of the object, towards which it is directed, and the occasions, on which it arises; and does not concern the nature of the feeling itself.

§. 27. *This primary truth not founded on reasoning.*

But perhaps it is again objected, that we can arrive at the great truth under consideration without assuming it as something ultimate, as something resulting from our constitution; and that nothing more is wanting in order to arrive at it, than a train of reasoning.—The sun, it is said, rose to-day, therefore he will rise to-morrow: Food nourished me to day, therefore it will do the same to-morrow; The fire burnt me once, therefore it will again.

But it demands no uncommon sagacity to perceive, that something is here wanting, and that a link in the chain of thought must be supplied, in order to make it cohere. The mere naked fact, that the sun rose to-day, without any thing else being connected with it affords not the least ground for the inference, that it will rise again; and the same may be said of all similar instances. Now the link, which is wanting in order to bind together the beginning and the end in such arguments as have been referred to, is the precise assumption, which has been made, and which is held to be as reasonable as it is necessary, because it is founded on an acknowledged, universal, and elementary feeling of our nature. And we may here affirm with perfect confidence, that, without making this assumption, the power of reasoning cannot deduce a single general inference, cannot arrive at so much as one general conclusion either in matter or mind.

But the moment we make the assumption, a vast foundation of knowledge is laid. Grant us this, (to which we are fully entitled by virtue of that elementary belief, which the Author of our being has uniformly called forth in the human mind in his appointed way,) that nature is uniform in her laws; then give us the fact, that food nourished us to-day, or that the sun rose to-day, or any other fact of

the kind, and it follows with readiness and certainty, that what has once been will be again.——The principle of the permanency and uniformity of the laws of nature is something antecedent to reasoning and not subsequent to it; something beyond reasoning and not dependent on it; one of its substantial and magnificent columns.

REMARK. The above mentioned primary truth and that of the preceding section are in fact the same. They are different only in being the two great and equal sections of a principle, which has no limits but those of the universe and eternity. In other words, one of them has exclusive relation to the past; the other to the future; the former to that which has been, and the latter to that which will be. And hence as the human mind cannot readily contemplate them under one point of view, they are for that reason considered separately.

§. 28. *Of the distinction between primary and ultimate truths.*

Such propositions or truths, as are here called PRIMARY, are sometimes spoken of as ultimate; nor is this last epithet improperly applied to them. But there seems, nevertheless, good reason for proposing the following distinction, viz. Primary truths may be always regarded as ultimate, but not all ultimate truths are primary. Primary truths are such as are necessarily implied in the mere fact of the existence of the mind and of its operations, particularly those of reasoning; and being not only the necessary, but among the earliest products of the understanding, may also properly be called ultimate. But we also apply the epithet, ultimate, to those general truths, facts, or laws in our intellectual economy, which are ascertained by the examination and comparison of many particulars, and which are supposed to be unsusceptible of any further generalization.

For instance, when the rays of light reach the retina of the eye, and inscribe upon it the picture of some external object, there immediately follows that state of the mind, which we call sight or visual perception. When the mental exercises of whatever kind are frequently repeated, we

find the general result, that they acquire facility or strength. —Again, when we behold certain appearances in the external world, such as green fields, enriched with rivulets, and ornamented with flowers and trees, there immediately exists within us that pleasurable feeling, which is termed an emotion of beauty.——Supposing ourselves to have come in such cases as these, as Mr. Locke says, "to the length of our tether," and to be incapable of making any further analysis, we call such truths, facts, or laws, *ultimate*. For the existence of these ultimate truths or laws we can give no other reason than this, that we are so formed, and that they are permanent and original characteristics of the mind. All the inquiries, which we are hereafter to make, will continually imply the existence of such ultimate or original laws, and it will be one great object to ascertain what are truly such.——But as the actual knowledge of these general facts is not an absolute prerequisite to the conduct of life, and in particular as it is not necessarily antecedent to the exercise of the reasoning faculty, we cannot call them PRIMARY in the same sense, in which that term has been applied to certain facts in our constitution already mentioned.

MENTAL PHILOSOPHY.

PART FIRST.

IMMATERIALITY

AND

GENERAL LAWS OF THE MIND.

CHAPTER FIRST.

IMMATERIALITY OF THE MIND.

§. 29. *Of certain frivolous inquiries concerning the nature of mind.*

Having briefly disposed of those topics, which may properly be deemed auxiliary and introductory to the main inquiry, we are now ready to enter more directly and decisively into the consideration of our mental being. All men may well be supposed desirous of learning, as far forth as possible, the true and exact nature and state of the soul; and without question it is altogether proper to attempt to satisfy this desire. But it becomes necessary, in entering into this somewhat difficult subject, to intimate at the outset the importance of guarding against an undue tendency to speculation, and of excluding such topics as evidently do not admit of any satisfactory results. It was the fault of the Schoolmen to indulge in such unfathomable discussions; and the unfavorable decision, which subsequent ages have pronounced on their laborious efforts, should remain a warning to others. It is perhaps necessary to mention some of the speculations, which are here referred to, in order that each one may judge for himself of the probable utility of entering into them. Among other things they are understood to have attempted, with much ostentation and with no small effort of inquiry, to ascertain the mode of the soul's existence; the distinction between its existence and its essence; whether its essence

might subsist, when it had no actual existence; and what are the qualities of the soul, considered as a non-entity.

It requires no deep reflection to conjecture the folly of these inquiries, and of others of not much greater reasonableness and importance; and if it were otherwise, the point must now be considered as sufficiently settled by the literary history of the Grecian sects, and particularly of the Scholastic ages. There are, however, other points, connected with the nature of the soul, which we might be culpable in declining to consider; and in particular that of its immateriality. This is a subject, which for various reasons cannot wisely be dispensed with. We ought not to exalt our nature, at the expense of the truth; but nothing less than the truth at least should ever induce us to assign to it a low and degrading estimate. If it be true, as Addison with his usual felicity has remarked, that one of the best springs of generous and worthy actions is the having generous and worthy thoughts of ourselves, then surely, whether the soul be formed of matter or not, is a great inquiry.

§. 30. *Origin and application of the terms, material and immaterial.*

If we cannot assert directly and positively what the mind is, we may at least approximate to a more intimate acquaintance with it, by attempting to evince, and illustrate its immateriality. But this term itself, and its opposite are first to be inquired into.

The words MATERIAL and IMMATERIAL are relative; being founded on the observation of the presence, or of the absence of certain qualities.

Why do we call a piece of wood or of iron material? It is because we notice in them certain qualities, such as extension, divisibility, impenetrability, and colour. And in whatever other bodies we observe the presence of these qualities, we there apply the term. The term IMMATERIAL, therefore, by the established use of the language and its own nature, it being in its etymology the opposite of

the other, can be applied only in those cases, where these qualities are not found.

Hence we assert the mind to be immaterial, because in all our knowledge of it we have noticed an utter absence of those qualities, which are acknowledged to be the ground of the application of the opposite epithet. The soul undoubtedly has its qualities or properties; but not those, which have been spoken of. Whatever we have been conscious of and have observed within us, our thought, our feeling, remembrance, and passion are evidently and utterly diverse from what is understood to be included under the term materiality.

Such is the origin of these two terms, and the ground of the distinction between them. And thus explained, they can hardly fail to be understood. We may, therefore, now proceed to state the evidence of the actual existence of that distinction between mind and matter, which is obviously implied in every application of them. In other words, we are to attempt to show, that the soul is not matter, and that thought and feeling are not the result of material organization.

§. 31. *Difference between mind and matter shown from language.*

Is it a fact, that the being or existence, called the SOUL, is distinct and different from that existence, which we call MATTER?—We have already remarked on the propriety of sometimes referring to the structure of languages, in order to illustrate our mental nature; and in respect to the question now before us, we are warranted in saying, that Language in general is one proof of such a distinction. In the last section, we saw the use of certain terms in our own language, and the grounds of it. All other languages, as well as our own, have names and epithets, distinctly expressive of the two existences in question. This circumstance, when we consider, that the dialects of men are only their thoughts and feelings embodied as it were, may be regarded as a decisive proof, that the great body of

mankind believe in both, and of course believe in a well founded distinction between them.

That such is the belief of men generally, as clearly evinced by the structure of languages and in various other ways, will not probably be denied. It is a matter too evident to permit us to anticipate a denial. When therefore, we take into view that there are grounds of belief fixed deeply and originally in our constitution, and that, in their general operation, they must be expected to lead to truth, and not to error, we are unable to harbour the supposition, that men are deceived and led astray in this opinion; that they so generally and almost universally believe in the existence of what in point of fact does not exist.

§. 32 *Their different nature evinced by their respective properties.*

Again, the distinction between mind and matter is shown by the difference in the qualities and properties, which men agree in ascribing to them respectively.—The properties of matter are extension, hardness, figure, solidity, and the like. The properties of mind are thought, feeling, volition, reasoning, the passions. The phenomena, exhibited by matter and mind, are not only different in their own naure, but are addressed to different parts of our constitution. We obtain a knowledge of material properties, so far as it is direct and immediate, by means of the senses; but all our direct knowledge of the nature of the mental phenomena is acquired by consciousness.

Every one knows that the phenomena in question are not identical. There is no sameness or similitude, for instance, in what we express by the terms hardness and desire, solidity and hatred, imagination and extension. Holding it to be unphilosophical to ascribe attributes so different to the same subject, we conclude the subjects of them are not the same. And accordingly we call the subjects of one class of phenomena Mind, and that of the other Matter.—But there is one of the properties of matter, which,

considered as applicable to mind, is worthy of a more particular examination.

§. 33. *The material quality of divisibility not existing in the mind.*

That there is an essential and permanent distinction between mind and matter, seems to follow in particular from an examination of that particular quality, expressed by the word, divisibility. All matter is divisible. However small we may imagine any particle to be, we must still suppose it to have a top and bottom, a right and left side; and therefore, to admit of being divided into different parts. All extension, which is acknowledged to be one of the primary qualities of matter, implies divisibility.

Now if divisibility and extension be not ascribed to the mind, all, that is contended for, is virtually conceded. But if, on the other hand, either or both of these qualities, for they reciprocally involve each other, belong to the mind, then the following difficulty arises.—If the mind itself be susceptible of division, as all matter is, then still more its thoughts and feelings may be thus divided. But this is contrary to all our consciousness; and consciousness is the only means or instrument, which we can directly employ in obtaining a knowledge of the mind. No man is ever conscious of a half, or a quarter, or a third of a hope, joy, sorrow, remembrance, or volition. Indeed if the soul were separable into parts, one part might be filled with joy, and another with sorrow at the same time; one part might be occupied with a mathematical demonstration, and another in framing a poem or a romance.

We may possess, at different times, different mental states both in kind and degree; but, however our feelings, when occuring at successive and different periods, may differ from each other in these respects, our consciousness never fails to ascribe to them individually an unity or oneness. And the unity, which we ascribe to the attributes or acts of the mind, still more we ascribe to the mind

itself. It is the whole soul, and not a moiety or fraction of it, which is the subject of its various feelings.

§. 34. *Opinions of Buffier on the soul's indivisibility.*

The sentiments of Buffier on this topic are so well expressed, and come from a writer of so much wisdom, that they seem to be suitably inserted in this place.—"I cannot, he says, without a degree of folly imagine, that my being or what I call *me* can be divided; for, were it possible that this *me* could be divided in two, it would then be *me* and not *me* at the same time: it would be so, as it is supposed; and would not be so, since each of the two parties must then become independent of the other: one might think, and the other not; that is to say, I might think and not think at the same time; which destroys every idea of *me* and of *myself*.

"Besides, this *me*, and all other beings similar to this *me*, in whom *unity* is necessarily conceived, and where I cannot suppose any division without destroying their very essence, and every idea I can entertain of them, is what I call an *immaterial* or *spiritual* being; so that, by destroying its unity, you destroy its entire essence, and every idea of its existence. Divide a thought, a soul, or a mind in two, and you have no longer either thought, soul, mind? This indivisibility is, moreover, evident to me by the interior sense of what I am; and, by the efficacy of the same sentiment, I likewise learn that what I call *me* is not properly what I call *my body*, as this body may be divided both from me, and in itself; whereas, with regard to *me*, I cannot be divided from myself."

§. 35. *The soul's immateriality indicated by the feeling of identity.*

There is another somewhat striking consideration, which may aid in evincing the immateriality of the soul. It is well known that the materials, of which the human body is composed, is constantly changing. The whole bodily system repeatedly undergoes in the course of the ordinary term of man's life, a complete renovation, and

yet we possess, during the whole of this period and amid these utter changes of the bodily part, a conciousness of the permanency, as well as of the unity of the mind. "This fact, remarks Mr. Stewart, is surely not a little favourable to the supposition of mind being a principle essentially distinct from matter, and capable of existing when its connection with the body is dissolved.

Truly if the soul, like the body, were made up of particles of matter, and the particles were in this case as in the other, always changing, we should be continually roving, as an old writer expresses it, and sliding away from ourselves, and should soon forget what we once were. The new soul, that entered into the same place, would not necessarily enter into the possession of the feelings, consciousness, and knowledge of that, which had gone. And hence we rightly infer, from an identity in these respects, the identity or continued existence of the subject, to which such feelings, consciousness, and knowledge belong. And as there is not alike identity or continued existence of the material part, we may infer again, that the soul is distinct from matter.

§. 36. *The material doctrine makes man an automaton or machine.*

The doctrine, that thought is the result of material organization, and that the soul is not distinct from the body, is liable also to this no small objection, that it makes the soul truly and literally a machine. If what we term mind be in truth matter, it is of course under the same influences. But matter, in all its movements and combinations, is known to be subject to a strict and inflexible direction, the origin of which is exteriour to itself. The material universe is truly an automaton, experiencing through all time the same series of motions, in obedience to some high and authoritative intelligence; and is so entirely subject to fixed laws, that we can express in mathematical formulas not only the state of large bodies, but of a drop of water or of a ray of light; estimating minutely extension and quantity, force, velocity, and resistance.

It is not thus with the human mind. That the mind has its laws is true; but it knows what those laws are; whereas matter does not. This makes a great difference. Matter yields a blind and unconscious obedience; but the mind is able to exercise a foresight; to place itself in new situations; to subject itself to new influences, and thus control in a measure its own laws. In a word, mind is free; we have the best evidence of it, that of our consciousness. Matter is a slave; we learn that from all our observation of it. It does not turn to the right or left; it does not do this or that as it chooses; but the subject of an overpowering allotment, it is borne onward to the appointed mark by an inflexible destiny.—If these views be correct, we see here a new reason for not confounding and identifying these two existences.

§. 37. *No exact correspondence between the mental and the bodily state.*

The train of thought in the last section naturally leads us to remark further, that there is an absence of that precise correspondence between the mental and bodily state, which would evidently follow from the admission of materialism. Those, who make thought and feeling the result of material organization, commonly locate that organization in the brain. It is there the great mental exercises, in the phraseology of materialists, are secreted, or are developed, or are brought out in some other mysterious way, by means of purely physical combination and action. Hence, such is the fixed and unalterable nature of matter and its results, if the brain be destroyed, the soul must be destroyed also; if the brain be injured, the soul is proportionally injured; if the material action be disturbed, there must be an exactly corresponding disturbance of the mental action. The state of the mind, on a fair interpretation of this doctrine, is not less dependent on that of the body, than the complicated motions of the planetary system are on the law of gravitation. But this view, whether we assign the residence of the soul to the brain or to any other part of the bodily system, does not appear to be

accordant with fact. It is not only far from being approved and borne out, but it is directly contradicted by well attested experience in a multitude of cases.

38. §. *Evidence of this want of exact correspondence.*

We are desirous not to be misapprehended here. We readily grant, that the mind, in our present state of existence, has a connection with the physical system, and particularly with the brain. It is, moreover, obviously a natural consequence of this, that when the body is injured, the mental power and action are in some degree affected; and this we find to be agreeable to the facts, that come within our observation. But it is to be particularly noticed, that the results are just such as might be expected from a mere connection of being; and are evidently *not* such as might be anticipated from an identity of being.

In the latter case the material part could never be affected, whether for good or evil, without a result precisely corresponding in the mind. But in point of fact this is not the case. The body is not unfrequently injured, when the mind is not so; and on the other hand the soul sometimes appears to be almost entirely prostrated, when the body is in a sound and active state. How many persons have been mutilated in battle in every possible way, short of an utter destruction of animal life, and yet have discovered at such times a more than common greatness of mental power! How often, when the body is not only partially weakened, but is resolving at the hour of death into its original elements, and possesses not a single capability entire, the mind, remaining in undiminished strength, puts forth the energy and beauty of past days!

We are now speaking of injuries to our corporeal part and of bodily debility in general, but if we look to to the brain in particular, that supposed strong tower and fortress of the materialists, we shall find ourselves fully warranted in an extension of these views there. According to their system the soul, (that is, what the materialists call the soul or what they substitute for it,) possesses

not merely a bodily habitation, but a fixed and local habitation in some selected part of the body and they are understood to be agreed upon the brain, as the particular place of its residence. But the objection to their views, which in its general form has already been made, exists here in full strength. If that organization, which they hold to result in thought and feeling, have its abode in the brain, it must be diffused through the whole of that organ, or limited to some particular part. But it appears from an extensive collection of well authenticated facts, that every part of the brain has been injured, and almost every part absolutely removed, but without permanently affecting the intellectual and sentient powers. "Every part of that structure, says Dr. Ferriar in a learned Memoir, the statements of which have not, as far as we know, been controverted, has been deeply injured or totally destroyed, without impeding or changing any part of the process of thought." He remarks again, after bringing forward a multitude of undoubted facts as follows; "On reviewing the whole of this evidence, I am disposed to conclude, that as no part of the brain appears essentially necessary to the existence of the intellectual faculties, and as the whole of its visible structure has been materially changed, without affecting the exercise of those faculties, something more than the discernible organization must be requisite to produce the phenomena of thinking."

§. 39. *Comparative state of the mind and body in dreaming.*

The views of the two preceding sections receive some confirmation from the comparative state of the mind and body in dreaming.—In sound sleep the senses sink into a state of utter and unconscious sluggishness; the inlet to every thing external, as far as we can judge, is shut up; the the muscles become powerless, and every thing in the body has the appearance of death. It is true, the soul appears

* See the Argument against the doctrine of Materialism, addressed to Thomas Cooper, Esq. by Dr. John Ferriar, and published in the 4th volume of Memoirs of the Manchester Philosophical Society.

for the most part to be fallen to a like state of imbecility; but this is not the case in its dreams, which are known to take up no small portion of the hours of sleep. At such times it does not appear to stand in need of the same repose with the body; otherwise it would seek, and possess it. Nor is its action to be considered an inefficient and sluggish one; which might afford ground for the conjecture, that the half awakened body had partially liberated and revived the fettered and extinguished mind. On the contrary, when the powers of the body are utterly suspended, the soul is often exceedingly on the alert; it rapidly passes from subject to subject, attended sometimes with sad, and sometimes with raised and joyful affections.

But this is not all; often in the hours of sleep the intellect exhibits an increased invention, a quickened and more exalted energy in all its powers. Many writers have remarked, that the conclusions of abstruse investigations have been suggested to them at such times. Not a few would conclude themselves persons of genius, if they could pronounce the arguments and the harangues in the awakened soberness of the morning, which they had framed in the visions of the night. So frequent and well known is this quickened mental action, that a certain writer has ventured to assert, with as much truth at least as is commonly found in antitheses, that the ligation of sense is the liberty of reason.*

§. 40. *The great works of genius an evidence of immateriality.*

But there is one more train of reflection, which may help to throw light on this subject. It is not enough, if

* This view of the soul has been taken by various writers. Addison, who entertained ennobling sentiments of our nature, has dwelt upon it at some length. He often touches on other topics, connected with the exercises of the soul; but he does it with such exceeding ease and grace; we enter so readily into the train of his reflections; that we are apt to allow him less originality and depth, than he merits.——See Numbers of the Spectator III, 487, 554, 593, &c.

we would fully understand its nature, to contemplate the soul merely in seasons of bodily prostration and sickness, in suffering, and in the hour of death. However capable the mind may be of discovering the greatness of its powers under these pressures and disadvantages, it would be too much to expect at such times a continued effort and elevation. And yet it is only a continuance of elevated effort, which can secure the highest results. When the senses are unclosed, when the powers of the physical system are unchained throughout, and are healthy and active, the human mind may be expected with fuller confidence to erect those vast creations, which we cannot but regard as an evidence of its purely spiritual nature. Results so ennobling are not congenial with what we know of matter. It is almost as revolting to our feelings as our understanding; to refer those works, which have stood the test of ages, to no higher origin, than what Mr. Hume calls a little agitation of the brain, and others would call, with but little difference of meaning, a secretion or developement either of the brain, or of organization in some other material part.

Among the numerous efforts, which are now referred to, it is difficult to make a selection. Many of them will occur of themselves. Standing forth, amid the successions of time, a monumental mark, they have as yet never failed to attract the gaze and wonder of men.——What framed the demonstrations of Euclid? The mind. Where was the authorship of the political institutions of Solon and Lycurgus, and of that still greater effort of political wisdom the American Constitution? In the mind. Was it the body or the soul of Homer, the intellect or the brain of the blind old bard, that infused the breath of immortality into the Iliad and Odyssey? What gave birth to the vast and perfect combinations of The Jerusalem Delivered, the Fairy Queen, and the Paradise Lost? Where shall we look for the origin of the Philippics of the Ancients, or in later times of the speeches of Fox, and of the orations of Bossuet?

In these cases, and in all others, where human genius

has triumphed in like manner, there is one short answer; man has an intelligent soul; man possesses an active and creative mind; in the words of Holy Writ, there is in man a spirit, and the inspiration of the Almighty hath given understanding.——Such we suppose to be the answer of mankind, of common sense, and of human nature, as well as of the Bible. It is an answer, which matter would never give, and which is itself a proof of the spirituality and nobleness it asserts. Giving ourselves up to the influence of the vast conceptions, embodied in the works and institutions of human genius, we find it as difficult to attribute them to a purely material cause as, it is to adopt the theory of the atheist, and ascibe the beautiful and complicated machinery of the universe to a fortuitous concurrence of atoms.

§. 41. *Of the immortality of the soul.*

With the subject of the immaterial nature of the soul, that of its immortality is closely connected. We are, therefore, naturally led to present a few suggestions on this last topic, although it will not be necessary to enter into it with much minuteness.— We suppose the soul to be immortal, or in other words to have its existence continued beyond the present life, because it is immaterial. Those, who hold that thought and feeing are in some way the direct result of material organization, admit, that the soul, or rather what they speak of as the soul, dies with the body; and certainly they would be inconsistent with themselves, if they did not do so. Their theory by their own admission imperiously requires, that man's noble and capacious intellect shall dissolve and scatter itself in the ashes of the grave; lost and annihilated, until it shall be created anew, if that should ever happen. But the opposite system, which we have endeavored to show to be the true one, holds out a different view of the destiny of our spiritual nature. It is true, the immortal existence of the soul does not follow with absolute certainty from the mere fact of its immateriality; but it is at least rendered in some degree probable. Certainly we have no direct

evidence of the discontinuance of the soul's existence, as we have of that of the body. What takes place at death is only a removal of the soul's action from our notice, but not, as far as we know, a cessation and utter extinction of it. The supposition, therefore, is a reasonable one, that the soul will continue to exist, merely because it exists at present, inasmuch as its immaterial nature does not require the suspension of its existence at death, and as we have at least no direct evidence of such an event.——Death, in the language of Mr. Stewart, only lifts up the veil, which conceals from our eyes the invisible world. It annihilates the material universe to our senses, and prepares our minds for some new and unknown state of being.

In the second place, considering man, as he is, to be a moral and accountable being, we feel as if his destiny were not fulfilled in the present life. It would unsettle all our hopes, trust, and happiness, if we did not believe in a great moral plan, the completion of which is as certain as the permanency of the omniscient Being, from whom it originated. But its completion in the present state is by no means evident; vice and virtue are here conflicting; and the eye of moral and religious faith looks anxiously forward to some future allotment, where the one shall meet its rebuke, and the other be crowned with its reward. Our present situation, considered in a moral point of view, strongly suggests, and even demands for the soul an hereafter.

§. 42. *Remarks of Addison on the soul's immortality.*

Furthermore there is something in the expanding and progressive nature of the soul, which strongly favors the supposition of its future and even unlimited duration. This important thought we find dwelt upon in the writings of Addison in the following terms.——"How can it enter into the thoughts of man, that the soul, which is capable of such immense perfection, and of receiving new improvements to all eternity, shall fall away into nothing almost as soon as it is created? Are such abilities made for no purpose? A brute arrives at a point of perfection

that he can never pass: in a few years he has all the endowments he is capable of; and were he to live ten thousand more, would be the same thing he is at present. Were a human soul thus at a stand in her accomplishments, were her faculties to be full blown, and incapable of farther enlargements, I could imagine it might fall away insensibly, and drop at once into a state of annihilation. But can we believe a thinking being, that is in a perpetual progress of improvements, and travelling on from perfection to perfection, after having just looked abroad into the works of its Creator, and made a few discoveries of his infinite goodness, wisdom, and power, must perish at her first setting out, and in the very beginning of her inquiries?" (Spectator, No. 111.)

But after all we must rest as to this point chiefly on Revelation. It is possible by various arguments to render the immortality of the soul in a high degree probable, but we do not profess to prove it beyond question; for there is nothing necessarily and in its own nature eternal but God himself. The permanency of created things does not depend necessarily on their being material or immaterial, but on the will of their Creator. If every star shines, and every flower blooms by the will of God; it is not the less true, that every soul lives by the same will. We might, therefore, remain in some degree of doubt on the subject of the soul's immortality, did not the scriptures convert our hopes and expectations into certainty. We are told, that life and immortality, (which is only a Hebraistic mode of expression for immortality of life,) are brought to light in the Gospel.

CHAPTER SECOND.

LAWS OF THE MIND IN GENERAL.

§. 43. *Existence of laws even in material objects.*

If it should be said in respect to the main argument of the preceding chapter, that after all it is merely negative, and only assures us what the mind is not, without telling us what it is, we readily assent to this suggestion. And we take this opportunity to repeat, what has been before intimated, our anxiety to avoid all inquiries, which may be either obviously frivolous in themselves, or which will necessarily, and from their very nature, elude the most careful search. That the mind is an existence, altogether distinct from what we term matter, was an accessible question, presenting a fair prospect of a satisfactory solution; but what the essence of the mind is, or what the mind is in itself, one man knows as much as another, all being equally ignorant. But it does not follow, because we are ignorant of our mental nature in some respects, we are, therefore, ignorant in all. On the contrary, if we are unable to penetrate into the interiour nature of the soul, we can, nevertheless, mark its operations, its growth, its results, and can distinctly point out some of the various laws by which it is governed. It is this last topic, to which we are next to proceed. It seems proper, however, before examining laws in their connection with and in their government of the mental action, briefly to consider them in their more obvious and general applications.

It requires but a slight examination of those works, which the Creator has so abundantly spread around us, in order to satisfy ourselves, that every thing in nature has its rules. The motion, expansion, increase, diminution, and position of objects, and whatever else we express when we speak of the changes they undergo, are controlled by determinate principles. There does not appear to be any exception, whatever objects we may turn our inquiries to. We see the truth of what has been said, even when we direct our attention to those parts of creation, which make the least approach to life, symmetry, and beauty. There is a regularity discoverable in the composition and formation of rocks, and in their position; and the same unchangeable rule, that holds the immense sun in his orbit, prescribes and sustains the condition of the minute particles of air and water. In such other natural objects, as approach more nearly to symmetry and life, we witness increased indications of order; for instance in the growth of plants and trees; in the separation of the moisture, that is taken from the earth, and its distribution to the trunk and rind, to the leaves, flowers, and branches. But nothing more than this subjection to some fixed rule, this regular order, is meant, when we use the term Law, and when we speak in particular of the laws of nature.

Nor is this state of things otherwise than might be anticipated. That there should be an arrangement and orderly condition even of material things seems inevitably to result from the mere fact of the existence of a Creator, to whom they owe their origin. That higher and effective existence, which we denominate God, implies, in its very elements, a pervading inspection, a sleepless and inscrutable superintendence, which looks upwards and downward, within and around, wherever there is aught of time or space, of visible or invisible, of material or immaterial.

§. 44. *Objection from the apparent disorders in nature.*

It is sometimes objected to this view of the connection

and order of nature, that many things happen by chance; and it must undoubtedly be admitted, that such, in many cases is the appearance. Nevertheless this appearance is owing rather to the feebleness of our discerning powers, than to any thing actually existing in the objects, towards which these powers are directed. In other words, it is to be ascribed rather to the imperfections of the mind, than to the irregularities of nature.

The correctness of this solution of the difficulty in question may be inferred from the fact, that events, both natural and moral, which appear accidental and matters of chance to one, are perceived by another, who has more information, to be subjected to the orderly influence of laws. The man of science, merely in consequence of his different mental position, often takes a very different view of the same object from the man, who is without scientific knowledge; and what, in this respect, is true of individuals, compared with each other, may equally well be said of the men of any particular age, compared with the men of a succeeding age. An ignorant generation will see mystery and danger, where an enlightened one will find neither. In the present age of the world an eclipse of the heavenly bodies is noticed without dismay, because it is regarded as one of the settled and permanent adjustments of nature; but Tacitus has informed us, what surprise, what doubt, and horror such an event could inspire in the days of Tiberius. A comet appeared in 1456; it was a period of great ignorance; every man looked on his neighbour with fear and astonishment, as if this strange sign in the heavens foreboded some great convulsion, some wreck of matter, or some subversion of empires.—But it so happened, that, in a subsequent age, this fearful visitant was carefully watched and noted by the English astronomer Halley. By means of his observations he not only proved, that it revolved round the sun, but was able to show its identity with the comets of 1531, 1607, and 1682; and of course that the period of its revolution was about seventy five years. He accordingly predicted, that it would return in 1758 or the beginning of 1759, which proved true.—Since

that time, the fears, that were connected with the appearance of these luminaries, no longer exist; men look upon them with different eyes; they regard them as permanent parts in the great arrangement and constitution of created things; not as the causes of terror and grief, but rather as the indications and proofs of infinite wisdom and power.

And then extending this train of thought yet further, if we mount upward from the intelligent being, which we denominate man, to those higher intelligences, which we know to exist with only an imperfect knowledge of the mode of their existence, how many of the secrets of nature may we suppose cleared up to them, which, yet remain mysterious to us! The obscurity, that rests on creation, diminishes more and more, as it is exposed to the investigation of minds of a higher and a higher grade, until we arrive at the mind of Omniscience, that embraces it with a glance, and every where beholds order, and truth, and harmony.

§. 45. *Remarks of Montesquieu on laws.*

These views do not profess to be novel; it is of more importance that they be found true; and it is some indication, that they are so, that similar sentiments, and expressed with the characteristic terseness and vivacity of that distinguished author, are found in the writings of Montesquieu. The passage is a fitting introduction to a Work, which with much reason is thought to have exerted an influence on Political, hardly inferiour to that of Locke's Essay on Mental Philosophy.

"Laws, in their most general signification, are the necessary relations arising from the nature of things. In this sense all beings have their laws, the Deity his laws, the material world its laws, the intelligences superiour to man their laws, the beasts their laws, man his laws.

They who assert, that *a blind fatality produced the various effects we behold in this world*, talk very absurdly; for can any thing be more unreasonable than to pretend that a blind fatality could be productive of intelligent Beings?

There is then a primitive reason; and laws are the relations subsisting between it and different beings, and the relations of these to one another.

God is related to the universe as creator and preserver; the laws by which he created all things, are those by which he preserves them. He acts according to these rules, because he knows them; he knows them, because he made them; and he made them, because they are relative to his wisdom and power.

Since we observe that the world, though formed by the motion of matter, and void of understanding, subsists through so long a succession of ages, its motions must certainly be directed by invariable laws: and could we imagine another world, it must also have constant rules, or it would inevitably perish."

§. 46. *Of laws in relation to the mind.*

The remarks on the subject of LAWS, which have thus far been made, are of a general nature, although illustrated hitherto by particular reference to the material world.

If it be true, that matter has its laws, still more should we suppose, that the mind has; if every vapour in the atmosphere moves in relation to some general principle, it might naturally be expected, that all mental acts also have their time, their condition, and their limits. And this conjecture is in various ways amply supported.

It could not long escape the notice of the inquisitive disposition of men, that, whatever might be the fact in other things, there are rules and laws of conduct; certain general principles, by which the intercourse and duties of men are regulated in all situations. The earliest of these, and such as were most general and necessarily antecedent to civil society, have been sought out, and embodied under the head of Natural Law. Then came the formation of the body Politic, and with it such new enactments as were suited to this new order of things; for man, whether alone or with others, has never existed nor is he able to exist without the guidance of some fixed principles.

The laws, which we now refer to, may be called in

some sense exterior, inasmuch as they have special relation to the duties of mankind, and their external conduct in general. But when, at a subsequent period, men turned their attention from the outward to the inward, they were not long in clearly discovering the marks of an interiour uniformity and order; they detected in every mental state a complete history, its beginning and progress, its relations and end; and thus gradually became assured of a set of subjective laws, giving guidance and support to the mind itself.——And it is these, which we are now more particularly to attend to.

§. 47. *Mental laws may be divided into two classes.*

The term Law, when applied to our mental nature, is merely a designation or statement of those circumstances, according to which the general action of the mind, and the more definite exercise of its particular susceptibilities are regulated.—If we are right in giving this account of mental laws, they naturally, although they may sometimes approximate and even run into each other, resolve themselves into two classes.

The first class are those, included in the first clause of the above definition, viz. such as restrict and limit the general action of the mind.—We find, when we resolve our complex states of mind into their parts, that we at last arrive at certain elementary thoughts, beyond which we cannot proceed; the nature of the mind itself will not permit it to go further. All those ultimate truths also, which we come upon at almost every step in the mind's history, and which we are equally unable to explain and to analyze further, are to be reckoned among the permanently restrictive laws of our spiritual being. The same may be said of whatever can be ascertained to be necessary and exclusive conditions of the mind's action in the whole progress of its inquiries, such as the well known and indispensable conditions of time and space.

The second class are those, which regulate in particular the separate susceptibilities of the mind; such, for example, as sustain and limit the associating principle, belief,

and reasoning.—The first class relate to the mind in general, the second to its parts; the first teach us, how far we can go, the second, under what circumstances we can reach the goal, which it is permitted to aim at; but the nature of both will more fully appear in our subsequent inquiries.

48. §. *Distinction between the susceptibilities and the laws of the mind.*

It may conduce to the better understanding of this general subject and of its numerous applications, to point out here particularly the distinction between laws and susceptibilities. Although they have sometimes been confounded together, it has been owing to mere inadvertence, since a distinction so clearly exists between them. This difference may be illustrated in the case of mental association.

The fact, that one state of mind is succeeded by another, that one idea calls up another, indicates a mental power or susceptibility; while the circumstances, whether more or less general, under which the exercise of this susceptibility is regulated, are more commonly and properly termed laws. The former mode of expression indicates that inherent energy, sometimes known as the power or faculty of association, which pervades and characterizes our mental nature; the latter indicates the particular limits, within which this form of the soul's power is restrained and governed.

Again, what we term belief is undoubtedly a distinct state of the mind, and of course implies the mental power or susceptibility of believing. But is is a matter sufficiently well known, that this power is not exerted at all times, and under all circumstances; in other words, one state of things is followed by belief, while another is not. Now LAWS OF BELIEF, in distinction from the power or susceptibility, are only general statements of those circumstances or perhaps more properly of those occasions, in which belief is found necessarily, and, as it were, from our very constitution to exist.

CHAPTER THIRD.

LAWS THAT LIMIT THE MIND.

§. 49. *Evidence of the general fact of the mind's being limited.*

We shall first consider the mind in those respects, in which its general action appears to be naturally and permanently limited. That there are such natural limitations and obstructions in the progress of knowledge, it is presumed, will not be doubted. Every one must be conscious of this, in some degree for himself; feeling, as we do, from time to time the struggles within us, repressed and driven back by the embankments of our nature, like the imprisoned bird, that beats the bars of its cage, and seeks flight in vain. As might be expected also, all languages bear witness to this restricted intellectual ability; for we never fail to find in them abundance of such terms as these, UNKNOWABLE, INCONCEIVABLE, INCOMPREHENSIBLE, IGNORANT, FOOLISH, and the like. Now we may be assured, that men would not have invented terms of this description, and in such numbers, unless they had been satisfied of the existence of a sound and ample cause for them. But it is not necessary to debate at length a point, on which there can hardly be supposed to be a difference of opinion.

Believing, therefore, although there may be no end to the mind's journey in the practicable and allotted direction, that the pathways of knowledge are hedged up by impassible barriers in various places on the right hand and

left, it will be the object of the present chapter to ascertain some of these limitations. And it may be added here, that this is the precise topic, referred to in a former section, which Mr. Locke thought of so much practical importance, and which first led him to direct his powerful intellect to the systematic study of human nature. We enter, therefore, into this discussion with the twofold encouragement of its own obvious utility, and of that philosopher's weighty authority.

§. 50. *Objection to this inquiry from the incompleteness of the mind's history.*

Nevertheless we are not ignorant of the objection, which is sometimes made even by those, who would be disposed to admit the general correctness of what has been said, to entering at all into this subject: viz. that it is too early a period in the mind's history to determine what are its boundaries, and what are not. The mind, it is said with truth, is essentially active and inquisitive; its own nature forbids its remaining stationary, but compels it, as it were, to make constant advances even on the present theatre of being; and hence it is contended, we are utterly unable to foresee what depths it may fathom, what heights it may ascend, and what limits it may pass in future times. That there is some weight in this objection, cannot be denied; but when rightly considered, it is valid only in part. It may justly require us to be cautious in our investigations, but should not compel us to give them up altogether.

We do not find, that objections of this sort deterred Locke from undertaking this inquiry. How affecting it is, to hear a man of such vast capacity, compared with the intellects of other men, acknowledging with the utmost simplicity and sincerity his mental weakness! "He, that knows any thing, knows this in the first place, that he need not seek long for instances of his ignorance. The meanest and most obvious things, that come in our way, have dark sides, that the quickest sight cannot penetrate into. The clearest and most enlarged understandings of

thinking men find themselves puzzled and at a loss in every particle of matter."

The distinguished metaphysician, who expresses himself in this humble way, ever sought the truth with the greatest earnestness; and what he noticed without, combined with what he felt within, sufficiently satisfied him, that some obstacles in the way of the mind's progress, although many might in the course of time be overcome, would remain insurmountable. Nor has the progress of knowledge since his time shown that conclusion to be a mistaken one. On the contrary, the history of mental efforts in all past ages, from the beginning to the present period, have tended to confirm his opinion of the mind's restricted power, and have shown, in some few instances at least, how far we may advance, and where our exertions are brought to a stand.*

§. 51. *The mind limited as to its knowledge of the essence or interiour nature of things.*

We may sometimes find ourselves unable to describe the laws, which restrict the general action and progress of the mind, with so much precision as we can those, which have relation to its particular susceptibilities; but there

* The whole fourth book of Mr. Locke's Essay relates to grounds of belief and the limits of our capacities. There is some reason to believe also, from the account which he gives of the way, in which he was led in these inquiries, that this book was the first written by him. On this subject, Mr. Stewart, in his Historical Dissertation, (Pt. II, §. 1,) has the following interesting remarks—"On comparing the *Essay on Human Understanding* with the foregoing account of its origin and progress, it is curious to observe, that it is the fourth and last book alone, which bears directly on the author's principal object. In this book, it is further remarkable, that there are few, if any, references to the preceding parts of the Essay; insomuch that it might have been published separately, without being less intelligible than it is. Hence, it seems not unreasonable to conjecture, that it was the *first* part of the work in the order of composition, and that it contains those leading and fundamental thoughts which offered themselves to the author's mind, when he first began to reflect on the friendly conversation, which gave rise

are good grounds for saying in general terms, that the mind is in some way permanently limited as to its knowledge of the essence of objects. The word ESSENCE is understood to express that interiour, but imperceptible constitution of things, which is the foundation of the various properties and qualities that are perceived; in other words, that particular constitution, which all existences must be supposed to have in themselves, independently of any thing and every thing external. But whatever this may be, either in the spiritual or material world, no man knows it, no man understands it.

A person may look on the outside of a watch or clock, and the visible part, the face and hands may indicate to him what was intended, viz. the hour and minute of the day. But although he may clearly apprehend this, he may be altogether ignorant of the internal and invisible mechanism, on which the external and visible result depends. And so in the material world we know the outward and sensible, while we are altogether shut out from that unsearchable efficacy, on which the external agency depends; and in the immaterial world we know the properties and qualities, while we are ignorant of that

---

to his philosophical researches. The inquiries in the first and second books, which are of a much more abstract, as well as scholastic nature, than the sequel of the work, probably opened gradually on the author's mind, in proportion as he studied his subject with a closer and more continued attention. They relate chiefly to the origin and to the technical classification of our ideas, frequently branching out into *collateral*, and sometimes into *digressive*, discussions, without much regard to method or connection. The third book, (by far the most important of the whole,) where the nature, the use, and the abuse of language are so clearly and happily illustrated, seems, from Locke's own account, to have been a sort of *after-thought;* and the two *excellent chapters on the Association of Ideas and on Enthusiasm* (the former of which has contributed, as much as any thing else in Locke's writings, to the subsequent progress of Metaphysical philosophy) were printed, for *the first* time, in the *fourth edition* of the Essay."

subjective entity, without which qualities and properties could not exist.

§. 52. *Our knowledge of the nature of mind itself limited.*

Some particulars will help to illustrate and establish what has been remarked.—In the first place, with the nature of the mind itself, which is the instrument and foundation of all other knowledge, men possess but an imperfect and limited acquaintance; nor have we reason to suppose that it will ever be essentially otherwise than it is at present. That the mind exists is a truth; this simple fact is a matter of undoubted knowledge; but the mode or nature of its existence; that interiour vitality, which constitutes the true mental being in distinction not only from material being, but also from its own attributes and qualities, is what men have never been able fully to comprehend, and probably never will.

In proof of the correctness of this sentiment, reference might safely be made again to consciousness, to each one's inward and personally deep conviction of ignorance on this subject. Not that consciousness makes a positive declaration of this ignorance, but it very clearly implies it, by its acknowledged inability to make us acquainted with any thing further than the mere qualities and operations of the mind. The schoolmen also might here be brought to our recollection, who long attempted, with all the force of their acute and disputatious intellects, to break down this barrier of knowledge, but without success. And without impropriety, we might refer likewise to the remarks, which are so commonly, and every where made, that the mind is not a direct subject of contemplation, that what is called its essence can never be found out, and that we know nothing of it in itself. Remarks of this kind are not made so frequently without grounds for them; they are founded in the general experience, and of course are valuable, considered as an expression of that experience.

This view, it is important to be kept in recollection, is not exclusive; we assert our ignorance of the mind in

some respects, but not in all. Our knowledge embraces a certain extent, but is unable to go beyond.

§. 53. *Remarks on the extent of this limitation.*

To prevent misapprehensions, therefore, it seems proper to point out some of the particulars, in which actual knowledge in respect to the mind, is supposed to exist.

(1) Men universally experience certain internal feelings and operations, such as perceiving, belief, volition, imagining, and comparing; and so far as the mere existence of these mental states is concerned, they have knowledge. They know the fact of their taking place, and know them also, as we shall have occasion to see, in their relations. (2) These feelings give occasion for the additional and altogether distinct notion of mind. It seems to be a well settled sentiment, that, without such mental states as have been referred to, the latter notion could never exist; that, without the actual experience of intelligence and emotion, men could never form the idea of an intelligent and sentient being. And so far, therefore, as the mere occasions of forming the idea of mind, and the mere existence of the idea, which they give rise to, are concerned, we may suppose ourselves to possess knowledge.—(3) Subsequently, but almost immediately, we experience another original state of mind, that of the relative suggestion of appropriation or possession. That is to say, we feel the ideas, which were the occasions of the additional notion of mind, to belong to this latter idea; the relative suggestion, the origin of which is inseparable from our constitution, indissolubly binds the two together as subject and attribute. And so far also we have knowledge.—We may go further in our inquiries into the mind, and say with certainty what it is not; for instance that it is not material, since we have never been able to observe and detect in it the qualities and operations of matter. Nor is it necessary to assert, that these are all the particulars, in which we may obtain direct and positive knowledge.

But after all, when we return to the main question of what the mind is in itself, of what the mind is, consider-

ed as separate from its qualities and operations, and any mere attendant circumstances, it is then we cannot avoid feeling our utter inability to penetrate the pale of its interiour nature. We contemplate it in the outer temple, but the veil excludes us from the shrine. Again and again we return to the examination of this high and mysterious thought, but it still remains simple, inseparable, and indefinable; and however long and intently we may revolve it for the purpose of breaking up its simplicity, and knowing more of its hidden and invisible essence, it will ever set our efforts at defiance.

§. 54. *Our knowledge of matter in certain respects limited.*

If we turn from mind to matter, to the knowledge of which some may suppose we possess a more obvious and easy access, we shall find our efforts circumscribed by like limits. We are able to advance to a certain extent in our inquiries, but there we find ourselves compelled to stop.

When, for example, a piece of wood, or any other of those material bodies, by which we are surrounded, is presented to any one for his examination, there are some things in this material substance, which may be known, and others, which cannot. Its colour, its hardness or softness, its extension are subjects, upon which he can inform himself, can reason, can arrive at knowledge. He opens his eye; an impression is made on the organ of vision, and he has the idea of colour. By means of the application of his hand to the wood, he learns the penetrability or impenetrability, the softness or hardness of the mass, which he holds. By moving his hand from one point to another in the mass, he is informed of the continuity or extension of its parts. But when he pushes his inquiries beneath the surface of this body, when he attempts to become acquainted not only with its qualities, but with that supposed something, in which those qualities are often imagined to inhere, and, in a word, expends his efforts, in obedience to this unprofitable determination, in learning what matter is, independently of its properties, he then

stumbles on a boundary, which cannot be passed, and seeks for knowledge where by their very constitution men are not permitted to know.

§. 55. *Our ignorance of the reciprocal connection of mind and matter.*

If we find both mind and matter incomprehensible to a certain extent, we might naturally anticipate no less mystery in their connection with each other, in their reciprocal action and influence. The fact of such a connection, and the extent to which it exists, have already been briefly remarked on. When the mind is strongly affected, the body is for the most part affected also; and on the other hand, when the body is either vigorous with health or depressed with sickness, the mind generally exhibits a sympathetic vigor of depression. If this be not uniformly and always the case, it certainly is in a great number of instances.

Of the truth of the general fact, with those exceptions and modifications made in the last chapter, there can be no doubt; but of the mode of the fact, of the manner of this connection, it is not within the powers of the human mind to conceive; for it is to be observed, it is not the operation of matter on matter, nor of mind on mind, which might be supposed to be something coming more readily within the range of our comprehension; but the operation on each other of existences, utterly distinct; not possessing, as far as can be judged, a single attribute in common.

§. 56. *Illustrated in the case of voluntary action.*

What has now been said, it will be noticed, relates to the general connection of mind and matter, the general reciprocation of influence; but this striking law of our nature shows itself constantly, and in particular instances.

We might refer, in particular, to all cases of voluntary exertion. Putting forth that act of the mind, which we call volition, we move a hand, a finger, a foot; mind puts

matter in motion; the material is controlled by the immaterial; but common as it is, it is not incomprehensible.

We might refer again, for a like instance of the connection we are considering and of our ignorance of the way in which it is effected, to every act of the Supreme Being. In the highest and truest sense God is MIND, a truly spiritual existence. The hands and feet and eyes, which are ascribed to Him in Scripture, are expressions, accommodated to man's limited views. He created all things. A desire, a mere volition gave birth to light and air, to earth and water, to the world and all it contains. We admit the fact, but can give no explanation; we live and move in the midst of the great result, but we know not how it was achieved.

The instances, which have now been mentioned, may be thought by some to be too diverse from each other in degree, if not in kind, to illustrate the same principle; but we are not singular in bringing them together for this purpose. In point of mystery, Mr Locke seems to place the dependence of bodily action on volition on the same footing with the wonder and inconceivableness of Creation itself. His expressions are these.—"My right hand writes, while my left hand is still. What causes rest in one, and motion in the other? Nothing but my will, a thought of my mind; my thought only changing, my right hand rests, and the left hand moves. This is matter of fact, which cannot be denied. Explain this and make it intelligible, and then the next step will be to understand Creation."

§. 57. *Further illustrations of our ignorance in respect to this connection.*

But this is not all. The influence we are speaking of, even in its more particular and definite exhibitions, is not all on one side. If it be true, that mind can govern matter, that the immaterial can shape that which is material to its own ways and purposes, it is not less so, that matter possesses a degree of control over the mind; the visible and tangible is capable of exerting a power on that, which can

be approached neither by sight nor touch. And if the exertion of influence in the former case is mysterious, it is equally so in the latter. It is impossible for any man to tell on the one hand, why a new state of mind should in any case cause a new state of matter; or on the other, why a new state or disposition of matter should cause a new state of mind, as we find to be the fact in whatever we have to do with the material world. Two obvious instances will suffice to suggest others.

I,—The rays of light are reflected from the various objects around us, and if they are only permitted to reach the retina of the eye, which is the end of their journey, how many pleasing appearances the mind becomes possessed of, and which it would not have had, were it not for the presence of a few material and very minute particles! There is at once spread out and displayed, as it were, in the soul all the diversities of the most delightful landscapes, the undulations of hill and valley, expanses and partial glimpses of water, reaches of forest of various form and hue, interspersed with cottages and cultivated places. Who could have imagined, that the soul of man would be so suddenly roused up to embrace such complicated and pleasing views at the mere presence and bidding of a few rays of light, the smallest and apparently most inefficient things in nature! Still more, who can point to the cause, or explain the method of it? Who can tell the mode of intercourse between those rays and the mind, except only the Being, who frames and knows all things?

II,—When the air is put in motion by musical instruments of whatever kind, how the whole soul is affected and filled with new sensations! How it languishes also with grief, or rejoices with hope, or glows with patriotic emotion! The action of these undulations of air not only fills the soul with present sensation and feeling, but opens up new trains of thought and emotion by association, and combines the thought and feeling of the past with the present.

"How soft the music of those village bells,
"Falling at intervals upon the ear.

"With easy force it opens all the cells
"Where memory slept. Wherever I have heard
"A kindred melody, the scene recurs,
"And with it all its pleasures and its pains."

§. 58. *Of space as a boundary of intellectual efforts.*

Furthermore, we find the action of our mental powers, when occupied in particular in gaining a knowledge of material things, to be restricted and limited by SPACE.

What space is, it is not necessary to undertake to say, because no person is without as clear a knowledge of it, as can possibly be given by any form of words. But one thing seems to be certain, little as we know of what goes under that name, that it bounds and shuts up all that part of our knowledge at least, which relates to matter. As far as our direct and positive experience is concerned, every one is prepared to admit, that his acquaintance with material objects is circumscribed in this manner. But we may go farther; we may make the appeal with confidence to the general experience, and aver on the ground of that experience, that it is impossible for men to form even a conception of the existence of matter independently of space.

In some respects also, space limits our conceptions of MIND. As long as we consider mind immaterial, we do not of course regard it as occupying space in the material sense; nor in any sense, of which language, which discovers the materiality of its origin in its whole structure, can convey any adequate notion. But however this may be, when we inquire for the mere fact, it is undoubtedly out of our power to conceive of either matter or mind existing out of space.

It has already been remarked, that the Supreme Being is an immaterial or spiritual existence, and it may be objected here, that this view tends to circumscribe and restrict the divine nature. But this objection is founded on a mistake. It is true our conceptions are bounded by space; the human mind in its highest flights cannot extend itself beyond its limits; but we are not prepared to say, that the actual existence of God is limited by our con-

ceptions. On the contrary we may suppose him to exist and act in regions far beyond the furthest excursions of all inferior intelligences, in hidden apartments and unexplored tracts of the universe, where the widest and most untiring range of thought in men and even in angels has failed to penetrate.—On this subject all language fails; all imagination comes short; in the words of Holy Writ applied to another case, *Eye hath not seen, nor ear heard, nor hath it entered into the heart of man to conceive.*

§. 59. *Of the relation of time to our mental conceptions.*

TIME also is another of those limits, which seems to have been imposed from the begining on men's faculties.

As time is different from space, so the relations, which existences of whatever kind have to it, are different. But without at present entering into the subject either of its nature or relations, we may lay down the general proposition, that we know nothing, and can conceive of nothing, where time is not. What we express by the word Eternity is only another name for time never completed; and consequently clearly intimates the limited compass of our understandings.

It is possible, the same objection may be made here as in respect to space, that this doctrine tends in some way to limit the natural existence of the Supreme Being. But this is a misapprehension. It does not limit the Divine nature, but only asserts, when applied to the Supreme Being, the limitation of our conceptions of his nature.

Mr. Locke once made the unadvised and hasty assertion, that external bodies operate upon us by impulse, and nothing else. Afterwards, he said with the candour characteristic of truly great minds, although he could conceive of no other way of their operation, yet it was too bold a presumption to limit God's power in this point by his own narrow conceptions. So in the present case, we may truly say, we cannot conceive of God's existing abstractly from time, or out of time, but it would be too bold a presumption in us to limit the Divine nature by our own narrow and bounded views. In point of fact

both time and space, which exceed the comprehension of the human mind, and consequently place a limit on all its efforts, dwindle into the very smallest compass, in comparison with the unlimited expansion and ubiquity of the Supreme Being. With him there is, properly speaking, no such thing as time ; it is lost and extinguished in the unfathomable recesses of an ever present eternity ; expressions, which, although as good perhaps as we can select, evidently intimate our ignorance of what we attempt to convey. The Scriptures expressly and repeatedly take this view. "With the Lord, (says an Apostle,) one day is as a thousand years and a thousand years as one day."

Although it may be humiliating to our pride, to find that our minds are so bounded and shut up, to learn that the utmost compass of our own knowledge and existence forms but a mere point amid the vast, unmeasured, and unmeasurable circumference of God's knowledge and existence, still we cannot wisely and consistently reject the great truth itself. The ablest and wisest men have received it, and in some instances it has had a partial effect of a very beneficial kind, inspiring an increased degree of humility and caution, and a feeling of forbearance and candour.—True, the poet Gray represents the mighty mind of Milton as having scaled the limits we have been contemplating, the *flaming bounds*, as he calls them.

But this is only the license and fiction of a poet. If that should ever happen, which he has so sublimely imagined, and men should ever break through the walls of space and time, which God has erected between himself and inferior intelligences, we might well anticipate the result, which the same glowing fancy has indicated ;

> "They saw, but blasted with excess of light,
> "Closed their eyes in endless night."

§. 60. *Mystery of human freedom as coexistent with the Divine prescience.*

Whether we look within or without, to the world of matter or of mind, instances in illustration of our subject will by no means be wanting. If there be a degree of

mystery even in the smallest particle of matter, sufficient to baffle our inquiries, then we may reasonably expect to be frequently put back and baffled in the very intricate subject of the mind and its relations. Accordingly we find various inquiries in the philosophy of the mind, which have hitherto eluded all efforts at a satisfactory solution of them; and many things render it not improbable, that they ever will.—One of these difficult topics, stated in a few words, is the consistency of man's freedom with the Divine prescience; but as it is a topic, which has been much debated, and on which an opinion should not be lightly hazarded, it seems proper to remark, that it is brought in here, merely for the purpose of illustration.

Various considerations and trains of argument are thought to have established these two distinct points, viz. the foreknowledge of God and the entire freedom of human actions. In the view of very many persons, both propositions are susceptible of being clearly and satisfactorily established. But another question immediately presents itself, which, by the admission of all parties, is not so easily disposed of. The consistency of the Divine prescience, which is supposed necessarily to imply an antecedent and perfect superintendence as its basis, with man's unshackled freedom, has hitherto been found a knot, a puzzle, which the greatest minds have found themselves unable to resolve.

What shall we say here? Have we arrived in this instance at a limit, which we cannot pass? Are we called upon to believe without being able to explain? Are we required distinctly to admit our inability to solve every thing?—If such be our apprehension of the state of this question, then surely it becomes us in this and in all similar cases, to submit cheerfully to what we have grounds for conceiving to be an ultimate restriction, an inevitable ignorance.

§. 61. *Limits of the mind indicated by the terms, infinity, eternity, &c.*

Again the limited nature of the human mind will be

found to discover itself in the use of such terms as these, eternity, infinity, universe, omniscience, incomprehensibility, &c.—We never can fully understand what is meant to be expressed by the word OMNISCIENCE, so long as we know not all things ourselves. We bear it on our tongues, it is true, and apply it to the Supreme Being; but every one knows and feels, that it falls vastly short of the mark.

We speak of the UNIVERSE, which means the whole; but it is impossible for us to form an idea of the whole, applicable to all existences, which shall perfectly and necessarily exclude any existence beyond its boundaries. No man's mind can limit space even in conception, however true it may be, that all our conceptions are limited by that; and wherever there is space, there either is, or may be existence. Therefore, when we speak of the universe, we hardly know what we speak of; it is something great, mysterious, and in part at least utterly undefinable, which the mind struggles after, but without the power to grasp it.—The terms, infinity, eternity, and the like imply, that the ideas, intended to be expressed by them, are imperfect; that there is something in them beyond the mind's reach; and of course that the efforts of the mind, when made in the direction indicated by them, are bounded and kept back by some fixed law.

It may be further added, that, in all truly simple ideas, we have reached a boundary, which we cannot pass. We cannot resolve them into others; we cannot detect in them any subordinate parts; we cannot define them; we must leave them as they are.

§. 62. *Of restraints resulting from ultimate facts of the mind.*

We encounter restraints also; in other words, we have gone as far as the powers of our minds will permit, whenever we have ascertained any ultimate facts or truths of our mental constitution. It is possible we may sometimes suppose ourselves to have arrived at ultimate principles, when we have not; but on the supposition that we have truly reached them, it is certain we can go no further.

Out of the multitude of instances, that will present themselves, a few will suffice to illustrate this.

I,—The nature of PERCEPTION, by means of which we become acquainted with external objects, is such, there can be no knowledge from this source, unless the external object be present in the first instance. However great we suppose its energies to be, the mind is here evidently restricted. It can have no sensations of sight without the presence of a visible object, no sensations of touch without the presence of a tangible object, no sensations of hearing without something audible.

II,—The mind finds itself restricted likewise in those subsequent conceptions of objects, which have once been perceived. The existence of such conceptions depends on the exercise of association ; and the action of association is known to be governed by fixed aud inflexible laws, the operation of which we cannot suspend and alter, except only indirectly and imperfectly.

III,—We cannot call up thoughts, as we shall hereafter have opportunity to notice, by mere direct volition ; and hence in all cases of reasoning and imagination, we find ourselves subject to the restraint occasioned by this inability.—It is the same in various other instances.

§. 63. *The sentient part, as well as the intellect has limits.*

There are boundaries also, although we may not be able to indicate them with equal clearness, in the sentient part of man. These restrictions undoubtedly differ from those, which have been considered, in not being impassible ; but it is certain, that this can never take place, that these boundaries can never be transgressed, without the most unhappy consequences.——The passions, for instance, have their due limits, and if it be possible, as we know it to be so from too frequent experience, for them to be exceeded, still it is always attended with an interruption of the general adjustment of the mind. If a man be exceedingly angry, the susceptibilities of the memory and of the judgment, and other powers will be disturbed ; if

he be animated with very strong fears or joys, the result will the same.

And what is a striking evidence, that the whole soul of man, the sentient part as well as the intellect, has its definite arrangement and limits, is, that, whenever the passions of whatever kind are indulged to a very great extent, they not only cause a temporary interruption of the just action of the mind, but may produce a permanent and total disorganization. Let them put forth their full power for any length of time, and the mind is torn, as it were, from its basis; there is felt and witnessed a wreck of the spiritual fabric, a prostration of its strength, a distortion of its symmetry, a blotting out of its magnificence.

§. 64. *Mental limitations implied in man's inferiority to his Creator.*

It is not necessary at present to pursue this general topic further, than merely to add the remark, that, while we shall find much in our mental structure to enhance our admiration, there will be something also to check the feeling of pride. What has been said in the course of this Chapter is sufficient perhaps to lead us to anticipate this. Much there will be undoubtedly, as we go on in our inquiries, to make us think well and highly of the mind and to encourage mental efforts, but from time to time there will be found something, which it is hardly less important to be acquainted with, to qualify this favourable estimation, and to restrain an overweening confidence.

And let us here pause and ask, can it be otherwise? Ought it to be otherwise, when we consider man's origin, the fewness of his days, his foundation in the dust? True, man is great and noble, compared with much, that lives, and flourishes, and perishes around him; but then how his greatness is diminished, when compared with much, that lives and flourishes above him! If there were with him, as with his Creator, neither beginning of years, nor beginning of knowledge, the case would be different. But since he began to know, as it were, but yesterday, and has only

such means of knowledge as have been given him, why should he be ashamed of his ignorance, or complain that every effort is not successful, that every wish is not gratified!

It is the necessary result of the relation he sustains to his Creator, that his mental powers are circumscribed. The Author of the mind could not have made it without limits, without its allotted boundaries, unless he had disrobed himself of the attribute of omniscience, and conferred it upon the creature; unless he had made man the source and centre of all foresight and all knowledge, and been willing to assign to himself a subordinate and inferiour station.

Let us not then do violence to our moral, as well as our intellectual being, by striving after that, which is forbidden; by forgetting the weakness of our nature; by rejecting the salutary consideration, that the excellence of man is but imperfection, and the wisdom of man but folly in comparison with God.

CHAPTER FOURTH.

LAWS OF BELIEF. (I) CONSCIOUSNESS.

§. 65. *Nature and degrees of belief.*

HAVING considered laws, so far as is necessary at present, as limiting and controlling the action of the mind in general, we now come to that second class, which was spoken of, viz. those, which have relation to the particular and subordinate susceptibilities of the mind, and of these, we shall first examine the LAWS OF BELIEF.

As to the nature of what is called Belief, when we use the term to express the result in distinction from the susceptibility, not much can perhaps be said more than this, that it is a simple idea, a simple intellectual state, with which we become acquainted, in the phraseology of Mr. Locke from REFLECTION, or more precisely by means of that internal intimation, called Consciousness. Not being a complex, but an uncompounded feeling, it does not admit of definition; and yet all are supposed to have a knowledge both of its existence, and of its general nature, as far at least as a knowledge of our elementary notions is attainable in any case.

As it is a simple idea, BELIEF is always the same in kind; but it admits of different degrees. We determine these differences of strength in the feeling by means of that same internal consciousness, which assures us of the existence of the mere feeling itself. In other words, we

are conscious of, or feel our belief to be sometimes weaker, and at other times stronger.

To these different degrees of this mental state, we give different names; a low degree is termed PRESUMPTION; a higher degree, PROBABILITY; and the highest possible belief is termed CERTAINTY.——When the mind is in that state, denominated Certainty, we are generally said to *know* the thing, to which this very strong belief relates. But when we use knowledge and certainty as synonymous, which is no doubt frequently done, we should remember, that the highest possible belief is sometimes caused by imperfect or false evidence, and of course that we may sometimes find ourselves indulging the very strongest belief of what does not actually exist.

§. 66. *Of the objects of belief.*

It is obvious, that the exercise of belief implies an object or something believed, not less so, than that the putting forth of memory implies something remembered. Any thing, which can be framed into a proposition, and is susceptible of the application of any of the forms of evidence whatever, may be an object of belief either in a higher or less degree. And hence there are so many things in nature, in the conduct of men, and in the pursuits and relations of life, coming within the limits of this statement, we shall decline attempting an enumeration of them, and merely say with Dr. Reid, that the objects of belief are all things, whatever they may be, which are believed.*

§. 67. *Of the laws of belief.*

If it be clear, that any part of our mental nature has its laws, (and after what has been said, no doubt can be thought to exist on that point,) it cannot fail to occur, that the power of belief is as likely as any thing else in the mind to be restricted and sustained in this manner. If it were otherwise, if belief could arise without reference to any fixed principles, men would shortly find themselves

*Reid's Intellectual Powers of Man, Essay II.

in a singular and unheard of condition; the foundations of all foresight and precaution, of all the common intercourse of life, of all society and government would be effectually undermined. A moment's consideration of what a state we should be in, in the defect of all fixed principles, operating as the origin and guidance of our opinions, must satisfy any one, that belief has its laws.

Accordingly our Creator has kindly attended to this important part of our mental economy, and has so ordered things within and without us, that there is no want of circumstances, which sustain a determinate and effective relation to this susceptibility.

It is a great and undoubted principle, that all things in the universe, coming within the range and cognizance of the soul, whether material or immaterial, visible or invisible, have an influence on it; in other words, that there is an universal law of belief. But this great principle, in consequence of the objects, which are capable of affecting the mind, being presented to it in different ways or under different forms, may be resolved into subordinate ones, and may accordingly be contemplated in parts or sections. It is on this ground, that we are able to use the plural, and to speak of laws of belief, the law of Consciousness, the law of the Senses, the law of Testimony, and the like.

§. 68. *Consciousness a law of belief.*

Before entering into the examination of the separate grounds of belief just referred to, it is proper to observe, it is not deemed necessary to make a distinct account of those original intimations, which seem to flow out necessarily from the mere fact of the mind's existence and active nature, such as the notion of mind, identity, self, or person, &c. Highly important as these elementary thoughts are, and controlling, as they constantly do, our belief; still it is to be remembered, they are comparatively few in number, and have already been in part attended to under the head of Primary Truths.

Of those elementary laws, therefore, which are appli-

caple to belief, the first we shall consider is that of CONSCIOUSNESS. We find no doubts expressed, that what we call by that name is the occasion of giving rise to, and of regulating our opinions and convictions within certain limits.

That portion of belief and knowledge, which has particular relation to the mental states, to our internal and spiritual qualities and operations, is generally referred by writers to the exercise of this law, as the ground of its origin. Nothing is more frequent than such language as this, that we possess by this means a knowledge of this or that internal feeling, a knowledge of this or that mental quality, an acquaintance with the different emotions, and passions, with volition, reasoning and the like.

However suitable such language is, and however well founded the doctrine implied in it, it may still be important to inquire somewhat at length, What is to be understood by the particular term CONSCIOUSNESS? Unless we do this, as the word is often employed without much precision, we shall from time to time be aware of an indistinctness and confusion, arising from this neglect.

§. 69. *Of what is to be understood by Consciousness.*

But before we can come to a satisfactory conclusion as to what is to be understood by the term we are looking into, two remarks are to be made.

First; the idea of mind; of that permanent something, which thinks and feels in distinction from mere thought and feeling, is antecedent to consciousness. In the chapter on Primary Truths, which professedly treated of such elementary thoughts and views as are the early and necessary results of our internal constitution, it was seen, that, immediately on the taking place of the first mental experience, the notion or idea of mind arises; that is to say, the idea of that distinct sentient existence, which is always implied, when we speak of ourselves. At any rate, whether this idea be immediately consequent on the first mental exercise or not, it arises at so early a period as to lay the foundation of that mental state we are considering. It

will be found an useless attempt to conceive of any such thing as consciousness, without implying in it the antecedent notion of mind or self-existence.

SECOND; another observation to be attended to, is, that conciousness is not a susceptibility or power of the mind. It seems impossible to consider it in that light, without abandoning every consistent notion of it at once. Nor will writers of authority be found in general so to regard it, if we take suitable pains to collect and compare the various expressions they employ.——It may indeed be admitted, that what is termed consciousness, though not a susceptibility itself, implies the exercise of one, that of judgment or relative suggestion; but there is no less evidence of its being as truly different from that particular power, the exercise of which is acknowledged to be implied in it, as cause is from effect.

§. 70. *Consciousness properly a complex state of the mind.*

But if consciousness be not a power or susceptibility, (terms, which in their application to the mind are employed as expressing essentially the same thing,) what are we then to understand by it?—And the answer is, that it may be described, with the nearest approach to a correct notion of it, as merely a complex state of mind embracing at least the three following distinct notions; viz. (1) the idea of self or of personal existence, expressed in English by the words SELF, MYSELF, and the personal pronoun I; (2) some quality or state or operation of the mind, whatever it may be; and (3) a relative perception of possession, appropriation, or belonging to. A person says for instance, I AM CONSCIOUS OF GRATITUDE. In this instance, which may be taken as representative of many others, the idea of SELF or of personal existence is expressed by the prououn I; there is a different mental feeling, and expressed by its appropriate term, that of the affection of GRATITUDE; the phrase, CONSCIOUS OF, expresses the feeling of relation, which instantaneously and necessarily recognizes the affection of gratitude as the attribute or property of the subject of the proposition.—

Consciousness, therefore, involving a relative idea, can never exist without at least two others; and any proposition, expresssive of consciousness, is necessarily expressive of a complex, and not of a simple state of mind...

It may be objected here, that this makes consciousness a mental law, and a mental state at the same time. True; but what is a law of belief? Only the existence of those general circumstances, in which belief necessarily arises; and of course there is no incompatibility in its so being. And in point of fact it will be found, that every case of consciousness, whether it embrace a greater or less number of simple ideas, furnishes occasion for belief, and is infallibly accompanied by it.

§. 71. *Of the proper objects or subjects of consciousness.*

As there are some things, to which consciousness, as the term is usually employed, relates, and others, to which it does not, it is proper to consider it in this respect in particular.——As to those thoughts, which may have arisen, or those emotions, which may have agitated us in times past, we cannot with propriety be said to be conscious of them at the present moment; although we may be conscious of that present state of mind, which we term the recollection of them; that is to say, of other feelings of the same kind, and having relation to a particular antecedent occasion.

Again, consciousness has no direct connection with such objects, whether material or immaterial, as exist at the present time, but are external to the mind, or in other words have an existence independent of it. It has relation only to things *in* the mind, as we sometimes say; or more definitely to states of the mind.

§. 72. *The objects of consciousness wholly internal and mental.*

As the remark at the close of the last section has relation both to material and immaterial existences, it seems proper to consider it distinctly in these two respects.

I,—We are not, strictly speaking, conscious of any material existence whatever; of the earth we tread, of the food that nourishes us, of the clothes that protect, or of any thing else of the like nature, with which we are conversant. In accordance, however, with the view which has been given of this subject, we can rightly assert our consciousness of the effects they produce within us, of the sensations of taste, of heat and cold, of resistance and extension, of hardness and softness, and the like. Our consciousness does not, in strictness of speech, hold a direct relation to the existence of the material world in any form, whether particular or general; that is to say, we are not directly conscious of such existence, but only of that state of mind, which we term a firm belief or knowledge of it.

II,—This view holds also in respect to immaterial things, even the mind itself, as we have had occasion already to see. We are not directly conscious, using the term in the manner which has been explained, of the existence even of our own mind, but merely of its qualities and operations, and of that firm belief or knowledge of its existence, necessarily attendant on those operations. "According to the common doctrine, (says Mr. Stewart, Philos. Essays, I, CH. I,) of our best philosophers, it is by the evidence of *consciousness* we are assured that we ourselves exist. The proposition, however, when thus stated, is not accurately true; for our own existence is not a direct or immediate object of consciousness, in the strict and logical meaning of that term. We are conscious of sensation, thought, desire, volition; but we are not conscious of the existence of mind itself; nor would it be possible for us to arrive at the knowledge of it (supposing us to be created in the full possession of all the intellectual *capacities* that belong to human nature) if no impression were ever to be made on our external senses. The moment that, in consequence of such an impression, a sensation is excited, we learn two facts at once;—the existence of the sensation, and our own existence as sentient beings: in other words, the very first exercise of my con-

sciousness necessarily implies a belief, not only of the present existence of what is felt, but of the present existence of *that* which feels and thinks; or (to employ plainer language) the present existence of that being, which I denote by the words *I* and *myself*. Of these facts, however, it is the former alone of which we can properly be said to be conscious, agreeably to the rigorous interpretation of the expression. The latter is made known to us by a suggestion of the understanding *consequent* on the sensation, but so intimately *connected* with it, that it is not surprising that our belief of both should be generally referred to the same origin."

In the same way we are not said to be conscious of any higher spiritual beings, although we may be conscious of a firm belief, that such exist. We are not conscious of God and of his existence; although we are so, as all men of the least moral and religious tendencies of mind will readily and gratefully acknowledge, of the idea or notion of a Supreme Author, and of the unalterable belief of his existence.*

§. 73. *The belief from consciousness of the most decided and highest kind.*

Consciousness is not only a law of our belief, but it undoubtedly is one of the most authoritative and decisive; in other words, the belief, attendant on the exercise of it, is of the highest kind. It appears to be utterly out of our power to avoid believing beyond a doubt, that the mind experiences certain sensations, or has certain thoughts, or puts forth particular intellectual operations, whenever in point of fact that is the case. We may be asked for the

* The views here expressed may be supposed to hold good also in respect to all abstractions whatever, which have a real and objective existence. Accordingly we are not conscious of space and time, on the common supposition of their possessing a distinct and real entity, although we are of the ideas of them, or of those new states of mind, which exist, when space and time are the objects of contemplation.

reason of this belief, but we have none to give, except that it is the result of an ultimate and controlling principle of our nature; and hence that nothing can ever prevent the convictions, resulting from this source, and nothing can divest us of them.

How often men retire within their own bosoms, shutting up the outward senses, and pleasing themselves with the soul's inward contemplations, with new trains of thought, with many past remembrances, with melancholy or joyful affections! Now it would be not only as easy, but as rational, to disbelieve the existence of the soul itself, as to disbelieve the existence of these rich and varied experiences, of which it is the subject. In fact, neither the one, nor the other is possible; nor has the whole history of the mind made known any instances, that have even the appearance of being at variance with this view, except a few cases of undoubted insanity. A man may reason against consciousness as a ground and a law of belief, either for the sake of amusing himself or of puzzling others, but when he not only reasons against it as such, but seriously and sincerely rejects it, it becomes quite another concern, and such an one has by common consent broken loose from the authority of his nature, and is truly and emphatically beside himself. It will be impossible to find a resting-place, where such a mind can fix itself and repose; the best established truths and the wildest and most extravagant notions will stand nearly an equal chance of being either rejected or received; fancy and fact will be confounded and mingled together; and the whole mind become a chaos like that of the world when it was without form and void.

CHAPTER FIFTH.

LAWS OF BELIEF. (II) THE SENSES.

§. 74. *General statement as to the confidence placed in the senses.*

THE second law of belief, which it falls to us to consider, is that of the senses. In speaking of the senses in this light, what we mean to say in respect to them is, that the feelings, to which they give rise, are, by our very constitution, the occasion of belief, or are attended by it. In this sense they are a law.

This statement, it will be noticed, involves and takes for granted the truth of the proposition, that belief and sensations go together. Nor is this assumption made without abundant evidence to support it. It must without much inquiry be clear to all, that the convictions and actions of men are daily controlled by the senses. As a general statement, it is undoubtedly true, that in the judgments, which we constantly form of human conduct, and of the existence, forms, properties, and relations of the material world, no one refuses them his confidence.

What better evidence can there be of the correctness of this statement, than the accordant sentiment and declaration of the great mass of mankind! On this point the feelings, conduct, and sayings of men are prompt and coincident.

When one man states to another a report of what has happened at some time, the hearer yields to him a great-

er or less degree of credence according to circumstances. But if the narrator asserts, that he saw or heard it with his own eyes or ears, that the affair actually came under the cognizance of his own senses, every body deems such an assertion enough; it is not thought important to inquire farther. But certainly if men believe in their neighbours for this cause, they would believe in themselves for the same cause; if they rely without hesitation on the sight and hearing of others, not less would they rely on their own.

§. 75. *The belief arising from the senses may be considered in two respects.*

But it is necessary, in order to have a correct conception of this subject, to make a more particular statement.

It will readily occur, that what we term the senses, without delaying to give a specific explanation of them here, are merely forms of bodily organization; they are in themselves utterly exclusive of any thing of an intellectual kind; and therefore, are to be regarded only as the instrument or medium of new mental states. Having premised this, we are prepared to remark further, that, by the constitution of our natures, every affection of the senses, whether from a material or any other cause, is followed by a corresponding affection or state of the mind. The belief, therefore, of which the senses are the law and the occasion, may be considered in two respects.

In the first place there is a belief attendant on the new feelings, which are thus occasioned, and which has particular reference to those feelings; we believe them to exist; and, as they are the direct subjects of our consciousness, there is neither doubt nor disagreement in this particular. From the nature of the case, all our sensations must be precisely such, both in kind and intensity, as we feel them to be. It is the actual feeling, and nothing else, which constitutes the sensation; and it bears a different name from a multitude of other feelings, not so much in consequence of a difference in itself, as in its immediate cause or antecedent.

In the second place there is a belief also, and perhaps not less strong and decisive, which has relation not to the mere feelings themselves, but to external objects. It is this in particular, which we have reference to, when we speak of the senses as a law of belief. The new feelings, following an affection of the senses, are in some sense the occasions, on which the active and curious mind moves out of the world of its own spiritual and immaterial existence, and becomes acquainted with matter. It is somewhat here as in the reading of a book. When we read, nothing but certain marks or lines, and arranged in a particular order, are directly presented to our senses; but we find them connected with new states of mind utterly distinct from the direct impression they make. A piece of paper, written upon with these inky delineations, becomes to the soul a sign of the most various and exalted ideas; and in like manner, in the permanent ordering of our mental nature, it is found to be the case, that certain new affections of the mind, provided they are caused by means of the senses, become the signs of various existences, which are wholly diverse from the feelings themselves. We experience the feelings, which all admit to be in themselves neither archetypes nor resemblances of any thing whatever, which is external to the soul; and then at once we become acquainted with a vast multitude of objects, that would otherwise have remained unknown to us; with trees and fields and waters, with the melody of birds and the sounds of the elements, with the sun and moon and stars of the firmament, and with all the forms and beauties and glories of creation.

§. 76. *Objection to reposing confidence in the senses.*

As has been remarked, the objects, of which our sensations are in this way the signs, are attended with belief. On the authority of such feelings as are immediately consequent on an affection of the senses, all mankind, if the evidence of their general conduct and of their express declarations is to be regarded, believe in those objects, as having a distinct and real existence, as having

forms, properties, and relations. Nevertheless without denying the fact of this general reliance on the senses as a ground of belief, an objection has been made to its being well placed. The objection, stated in a few words, is this; That our senses sometimes deceive us, and lead us into mistakes.

In support of the objection, such instances as the following are brought forward.——The sun and moon appear to the spectator on the earth's surface to be a foot or two in diameter, and little more than half a mile high; a strait stick, thrust into the water, appears to us crooked, as seen by the eye in that position; a square tower at a distance is mistaken for a round one; a piece of ice for a stone; a brass coin for a gold one. Nor are such mistakes to be ascribed solely to the sense of sight; they are not unfrequently committed, when we rely on the intimations of the taste and smell, the touch and hearing.

Various facts of the above kind have been brought forward to discredit the senses, and to prevent a reliance on them. It is not necessary to extend the enumeration of them, as these will serve for a specimen of the whole. It may be proper to add, however, that we are reminded also of our dreams, and of the acknowledged fact, that whatever is the subject of them often appears as well defined to our perceptions as what takes place, when we are awake; and yet there is nothing actually seen or heard.

§. 77. *The senses imperfect rather than fallacious.*

That there are some apparent grounds for the objection, which has been made to a full reliance on the testimony of the senses, it is not necessary to deny. Nevertheless the great mass of the alledged fallacies originating from this cause, notwithstanding the perplexities they have occasioned Malebranche and his predecessors and followers in the same path, admit of a satisfactory explanation.

But before entering into particulars, it is requisite to make the general remark, that the senses are more prop-

erly imperfect than fallacious; and that they lead us astray, not so much by their own direct action, as in consequence of our expecting too much of them. Now if we keep this in view, and moderate and chasten our expectations by the evidently limited nature of the senses, we shall find less to complain of.

Among other things should it be kept in mind, that each sense acts in its own allotted sphere, and can be auxiliary to the enlargement of our knowledge only within the limits of that sphere. Accordingly, in order to a correct result in any particular case, there may sometimes be need of a combined action; there may be need of the testimony of other senses. In many cases, where we suppose ourselves to be led into mistakes by the sense of sight, we may obtain a more correct estimation by calling in the aid of the touch. And we are permitted, and we may say, required, to carry out and complete the intimations of the senses by the deductions of reasoning. If the bodily eye alone be unable to give us a correct idea of the sun and moon, the eye of the mind may rightly be called in to its assistance. By this means we cannot only indicate the size of those bodies, but mark out the path of their motion; and thus not only seeing those things, which actually exist, but those, which are to be hereafter, we can predict their position and appearance, before that position and those appearances happen.

§. 78. *Some alledged mistakes of the senses owing to want of care.*

If the course, pointed out in the last section, were always followed, the mistakes we are exposed to would be less frequent. But even when we refer to all the senses, and combine with this reference the deductions of reasoning, we may still err from want of care. Beyond all question some of the mistakes, ascribed to the senses, are owing topremature inferences from them; to a want of caution, discrimination, and full inquiry.

This particular subject is illustrated as follows by Dr.

Reid.—"Many things called the deceptions of the senses are only conclusions rashly drawn from the testimony of the senses. In these cases the testimony of the senses is true, but we rashly draw a conclusion from it, which does not necessarily follow. We are disposed to impute our errors rather to false information than to inconclusive reasoning, and to blame our senses for the wrong conclusions we draw from their testimony.

"Thus, when a man has taken a counterfeit guinea for a true one, he says his senses deceived him; but he lays the blame where it ought not to be laid: for we may ask him, did your senses give a false testimony of the colour, or of the figure, or of the impression? No. But this is all that they testified and this they testified truly. From these premises you concluded that it was a true guinea, but this conclusion does not follow; you erred therefore, not by relying upon the testimony of sense, but by judging rashly from its testimony. Not only are your senses innocent of this error, but it is only by their information that it can be discovered. If you consult them properly, they will inform you that what you took for a guinea is base metal, or is deficient in weight, and this can only be known by the testimony of sense.

"I remember to have met with a man who thought the argument used by Protestants against the Popish doctrine of transubstantiation, from the testimony of our senses, inconclusive; because, said he, instances may be given where several of our senses may deceive us: how do we know then that there may not be cases wherein they all deceive us, and no sense is left to detect the fallacy? I begged of him to know an instance wherein several of our senses deceive us. I take, said he, a piece of soft turf, I cut it into the shape of an apple; with the essence of apples, I give it the the smell of an apple; and with paint, I can give it the skin and color of an apple. Here then is a body, which if you judge by your eye, by your touch, or by your smell, is an apple.

"To this I would answer, that no one of our senses deceives us in this case. My sight and touch testify that it

has the shape and colour of an apple: this is true. The sense of smelling testifies that it has the smell of an apple: this is likewise true, and is no deception. Where then lies the deception? It is evident it lies in this, that because this body has some qualities belonging to an apple, I conclude that it is an apple. This is a fallacy, not of the senses, but of inconclusive reasoning."*

§. 79. *Of mistakes in judging of the motion of objects.*

"Many false judgments, (continues the same judicious writer,) that are accounted deceptions of sense, arise from our mistaking relative motion for real or absolute motion. These can be no deceptions of sense, because by our senses we perceive only the relative motions of the bodies; and it is by reasoning that we infer the real from the relative which we perceive. A little reflection may satisfy us of this.

"It was before observed, that we perceive extension to be one sensible quality of bodies, and thence are necessarily led to conceive space, though space be of itself no object of sense. When a body is removed out of its place, the space which it filled remains empty till it is filled by some other body, and would remain if it should never be filled. Before any body existed, the space which bodies now occupy was empty space, capable of receiving bodies, for no body can exist where there is no space to contain it. There is space therefore wherever bodies exist, or can exist.

"Hence it is evident that space can have no limits. It is no less evident that it is immovable. Bodies placed in it are movable, but the place where they were cannot be moved; and we can as easily conceive a thing to be moved from itself, as one part of space brought nearer to, or removed further from another.

"This space, therefore, which is unlimited and immovable, is called by philosophers *absolute space*. Absolute, or real motion, is a change of place in absolute space.

*Reid's Intellectual Powers of Man, Essay II.

"Our senses do not testify the absolute motion or absolute rest of any body. When one body removes from another this may be discerned by the senses; but whether any body keeps the same part of absolute space, we do not perceive by our senses. When one body seems to remove from another, we can infer with certainty that there is absolute motion, but whether in the one or the other, or partly in both is not discerned by sense.

"Of all the prejudices which philosophy contradicts, I believe there is none so general as that the earth keeps its place unmoved. This opinion seems to be universal, till it is corrected by instruction, or by philosophical speculation. Those who have any tincture of education are not now in danger of being held by it, but they find at first a reluctance to believe that there are antipodes; that the earth is spherical, and turns round on its axis every day, and round the sun every year. They can recollect the time when reason struggled with prejudice upon these points, and prevailed at length, but not without some effort.

"The cause of a prejudice so very general is not unworthy of investigation. But that is not our present business. It is sufficient to observe, that it cannot justly be called a fallacy of sense; because our senses testify only the change of the situation of one body in relation to other bodies, and not its change of situation in absolute space. It is only the relative motion of bodies that we perceive, and that we perceive truly. It is the province of reason and philosophy, from the relative motions which we perceive, to collect the real and absolute motions which produce them.

"All motion must be estimated from some point or place, which is supposed to be at rest. We perceive not the points of absolute space from which real and absolute motions must be reckoned: and there are obvious reasons that lead mankind in the state of ignorance, to make the earth the fixed place from which they may estimate the various motions they perceive. The custom of doing this from infancy, and of using constantly a language which supposes the earth to be at rest, may perhaps

be the cause of the general prejudice in favor of this opinion.

"Thus it appears, that if we distinguish accurately between what our senses really and naturally testify, and the conclusions which we draw from their testimony, by reasoning, we shall find many of the errors, called fallacies of the senses, to be no fallacy of the senses, but rash judgments, which are not to be imputed to our senses."

§. 80. *Of mistakes as to the distances and magnitude of objects.*

One class of the fallacies by means of the senses is made up of those errours we commit in our perceptions of the distance of objects. Our sight, it is said, often represents objects to be near which are distant, and objects to be distant, which are near. That we often form erroneous judgments as to the distance of objects is true; but it is a mistaken sentiment, which ascribes these erroneous opinions exclusively to the misrepresentations of the sight, or of any other sense. The subject of distance will shortly come up again; and we shall therefore anticipate it only so far as to remark, that the perception of distance is not an original act of the sight, but is something acquired. We are not properly said to see distance, but rather to judge of distance by sight; and hence the data, furnished by that sense, may be right, and still the conclusions deduced from them be wrong.

II,—Another class of errours are those of magnitude. The notions, which we form on that subject also, are acquired, and not original. We judge objects to be great or small in comparison with ourselves or with one another; and not in consequence of any thing, which is directly and immediately perceived in the objects themselves. We might call many objects small, which happened to be of the size of a particular diamond, and yet not inconsistently speak of the diamond itself as a very large one; and this for the simple reason, that our notions of large and small are not absolute but relative, and are formed by repeated acts of comparison. If there were but one object in creation beside ourselves, and if we could

not reason from ourselves to that object, we could not possibly form any notion of its magnitude as distinct from the mere idea of extension. It is very clear our senses could not of themselves authorize us to speak of such an object as large or small. Nor could it be done by reasoning, inasmuch as there are supposed to be no other objects, with which to compare it.—These few remarks, the correctness of which may more fully appear hereafter, will suffice to evince, that such mistakes, as may exist in regard to the distance and magnitude of objects, are not exclusively attributable to the senses.

§. 81. *The senses liable to be diseased.*

There is one respect, however, in which it is perhaps true, that we can speak with propriety of deceptions, arising from the cause now under consideration. The body as a whole being liable to be diseased, the senses as a part of the physical system are of course not exempted from this liability. As a mere question of fact, it cannot be deemed a matter of doubt, that the senses are often physically disordered; and at such times all persons are liable to be led astray by them. What is sweet to persons ordinarily, may appear bitter to one with a diseased palate; what is white to the mass of mankind may appear of a yellow hue to one, whose organ of sight is diseased; the physical condition of the sense of touch may be so perverted as to lead the diseased person to imagine he is made of glass or feathers instead of flesh and blood.

But it is surely enough to say, in respect to cases of this kind, that such is the condition of humanity, the common allotment, stamped both upon body and mind, and on all their powers; and he, who knows it not, has, in great likelihood, studied more carefully the powers and excellencies, than the infirmities of human nature.

What principle in our mental constitution is not liable to be perverted? What susceptibility is not liable to find its action suspended? What strength is there, that may not be weakened? Or what beauty that may not be deformed? In all our conduct we rely, and very correctly,

on the MEMORY, but the laws, which sustain that inestimable faculty, will sometimes grow weary, inconstant, and treacherous. We rely with equal readiness on the REASONING power; no one doubts, that its conclusions are a ground of belief. But what is reasoning, when uttered in the ravings of a madman, or when drawing its conclusions in a lunatic asylum?

It follows, therefore, if the senses deceive us in the case we are now attending to, the fault, if such it is to be considered, is not an exclusive one. It belongs to other parts of our nature also, not excepting its noblest and most efficient characteristics.

§. 82. *Our knowledge of the material world from the senses.*

It will be noticed, that, in what has been said, we have taken for granted the actual existence of an external material world; and we may add here, that it is by means of the senses we have a knowledge of such existence. It would have been premature to have adverted particularly to this subject, without first noticing and disposing of the objection, that the senses are not entitled to our reliance. From what has been brought forward, it clearly appears, that the position of their leading us astray does not hold good when we separate the proper objects of them from what are not, and when we guide and carry out the intimations of one sense by the aids of the others and of the reasoning power.

In respect to the topic now especially to be considered, it may perhaps be said with confidence, that no man, who employs the senses at all, can doubt of the real existence of an external, material creation. All external nature is operating upon us from the very moment of our birth; and giving origin, consistency, and strength to this belief. The resistance, which bodies present to the touch, when that sense is impressed upon them by the agency of the muscles, probably gives occasion for the distinct and essential idea of externality; and with this idea the senses soon enable us to associate others, as extension, colour, form, and all material qualities and properties. In this

way we become acquainted with the whole outward world, which, we are now prepared to assert explicitly, has an actual and independent existence.

But a new train of thoughts arises here. It may be said that the mere fact of our having ideas of externality, extension, colour, and the like, does not necessarily involve and imply the true and actual existence of those things, which they represent, or of which they are supposed and believed to be the effect. In other words we may possess certain internal affections, and attribute them to something external and material as their cause; and we may truly and sincerely believe the reality of such a cause, while in point of fact it does not exist; and consequently, our conviction of a truly existing material world may be a self imposition and delusion. On this view of our exclusion from any satisfactory knowledge of a material world, which is not so singular as not to have had some acute advocates, a few remarks are to be offered.

§. 83. *Correctness of their testimony in this respect.*

The first remark, which we have to make, concerns the mere fact of belief. We have already made the declaration with confidence, that no man, who makes use of the senses at all, can doubt of the reality of external material things. It is no presumption to assert, that the belief of the reality of an external cause of our sensations is universal. This is the common feeling, the common language of all mankind.

Those, who deny the propriety of relying on the evidence of the senses for the existence of the material world, and who deny such existence, should explain this belief. That such a belief exists, cannot be denied; that it is a false belief, an unfounded conviction, ought not to be lightly asserted. It wars too much, as even a slight examination would suffice to show, with the sentiments of man's moral and religious constitution.

It is to be acknowledged with gratitude, that the great mass of mankind fully believe in the existence of

the Deity, a being of perfect truth as well as benevolence. But to create man so that he should be irresistibly led to believe in the existence of a material world, when it did not exist, to create him with high capacities of thought, feeling, and action, and then to surround him with mere illusive and imaginary appearances, does not agree with that notion of God, which we are wont to entertain. Mr. Stewart, in speaking of the metaphysical inquiries of Des Cartes, observes, that his reasonings led him to conclude, that God cannot possibly be supposed to deceive his creatures; and, therefore, that the intimations of our senses and the decisions of our reason are to be trusted to with entire confidence, wherever they afford us clear and distinct ideas of their respective objects.

In the second place, it will undoubtedly be admitted that the sensations, which have been spoken of, have an existence. This existence is wholly internal; but still the simple fact remains that they exist; our consciousness most decisively teaches us so. But it has been laid down as a primary truth, a first principle, that there is no beginning or change of existence without a cause. This is an elementary principle, placed as far above all objection and scepticism as any one can be, and eminently preliminary to the full exercise of reasoning.

And where then is the cause of these internal effects? What man, who denies the existence of the material world, is able to indicate the origin of these results? If, yielding to the suggestions of our nature and the requisitions of our belief, we seek for a cause external to ourselves, we find a satisfactory explanation; otherwise we may expect to find none of any kind.

§. 84. *The senses as much grounds of belief as other parts of our constitution.*

Furthermore, it must be admitted, as has already been particularly stated and shown, that there are certain original sources or grounds of belief in our constitution. To say otherwise would be to loosen and destroy the foundation of all knowledge, whether that knowledge concern-

ed matter or mind. But what evidence is there, that there are such original sources of belief, or that any one thing in particular is the foundation of such belief more than any other thing? The answer is our own internal consciousness and conviction, and this merely; we are conscious of belief, and are able to trace it to the occasions which give it rise.

Now if we carefully examine our minds, we shall find, that the intimations from the senses as effectually cause belief, as any other source of evidence whatever. Our consciousness, our internal conviction tells us that our belief is as decisively regulated by the perceptions, derived through the senses, as by our intuitive or inductive perceptions; and that they are as much a ground of knowledge. We assert this with confidence; therefore if the senses are not a ground of belief and knowledge, the way is fairly open for unlimited scepticism on all subjects. It will in this case be impossible to fix upon any thing whatever, which is to be received as evidence, and men must give up all knowledge of intellect as well as matter, and will be at once released from all moral obligation.

§. 85. *Opinions of Locke on the testimony of the senses.*

As the satisfactory understanding of this subject is of much practical importance, we shall close what has been said upon it by some passages from Locke, whose clearness of apprehension never fails him, and who has the advantage of proposing his opinions in a diction, though somewhat antiquated, yet free, plain, and energetic,—"If after all this, (he says in the Fourth Book of his Essay,) any one will be so skeptical as to distrust his senses, and to affirm that all we see and hear, feel and taste, think and do, during our whole being, is but the series and deluding appearances of a long dream, whereof there is no reality; and therefore will question the existence of all things, or our knowledge of any thing; I must desire him to consider, that, if all be a dream, then he doth but dream that he makes the question; and so it is not much matter that a waking man should answer him. But yet,

if he pleases, he may dream that I make him this answer, that the certainty of things existing in *rerum natura*, when we have the testimony of our senses for it, is not only as great as our frame can attain to, but as our condition needs. For our faculties being suited not to the full extent of being, nor to a perfect, clear, comprehensive knowledge of things, free from all doubt and scruple; but to the preservation of us, in whom they are, and accommodated to the use of life; they serve to our purpose well enough, if they will but give us certain notice of those things which are convenient or inconvenient to us. For he that sees a candle burning, and hath experimented the force of its flame, by putting his finger in it, will little doubt that this is something existing without him, which does him harm, and puts him to great pain; which is assurance enough, when no man requires greater certainty to govern his actions by than what is as certain as his actions themselves. And if our dreamer pleases to try whether the glowing heat of a glass furnace be barely a wandering imagination in a drowsy man's fancy; by putting his hand into it he may perhaps be wakened into a certainty greater than he could wish, that it is something more than bare imagination. So that this evidence is as great as we can desire, being as certain to us as our pleasure or pain, *i. e.* happiness or misery; beyond which we have no concernment, either of knowing or being. Such an assurance of the existence of things without us is sufficient to direct us in the attaining the good, and avoiding the evil, which is caused by them; which is the important concernment we have of being made acquainted with them."

CHAPTER SIXTH.

LAWS OF BELIEF. (III) TESTIMONY.

§. 36. *Of testimony and the general fact of its influencing belief.*

We shall next consider HUMAN TESTIMONY. By this is commonly meant the report of men concerning what has fallen under their personal observation. And this forms a third law or ground of Belief.

As to the fact, that men readily receive the testimony of their fellow beings, and that such testimony influences their belief and conduct, it cannot be denied. If a person should seriously deny the truth of a well attested statement in history, or question the well attested existence of a distant nation or city, merely because the evidence happened to be that of human testimony, it would be thought truly strange and unaccountable.

And surely if it were otherwise, if there were not this prompt and confiding reliance on testimony, a state of things would be presented very different from what actually exists. Without a general confidence in what men assert, every one's knowledge of events and facts would be limited to those only, of which he himself had been a personal witness. In this case no American, who had not been a traveller, could believe, that there is such a city as London; and no Englishman in a like situation could believe, that there is such a city as Rome; and no person whatever has any ground for be-

lieving, that such men as Hannibal and Caesar have ever existed.

With the great mass of mankind the exclusion of testimony as a ground of belief would be the means of depriving them of the greater part of what they now know. The vast world would be only what they themselves see, an ORBIS TERRARUM, bounded by the narrow range of their native hills; the renowned men and deeds of the world would be summed up in the persons and acts of the private circle of their acquaintances; myriads of human beings, tribes and nations of men, uncounted abodes of life and numberless works of genius would virtually pass away and be lost. Their condition would be less favourable than that of Virgil's shepherd, who believed in the existence of the Imperial City, the reports of which had reached him in his solitudes, and only mistook in comparing great things with small, and in supposing it to be like those humble villages of Mantua, where he had tended his flocks.

§. 87. *Of the various explanations of the origin of confidence in testimony.*

Admitting the fact, that men place great confidence in testimony, and that without such confidence one principal source of knowledge would be shut up, a question nevertheless arises here, What is the ground of this reliance? In some points of view this inquiry is probably of less importance than the mere question of the fact; still the subject cannot be wholly neglected, consistently with the desire of giving a succinct view at least of the mind in all its parts.

It is proper to remark first, however, that the credence or reliance in question exhibits itself at a date earlier than any period our recollection goes back to; and, therefore, it is impossible to explain the grounds of it with absolute certainty. That provision has in some way been made for a belief in the declarations of our fellow beings, is a fact; and that it takes effect very early in life, is a fact

also; but further than this, we can only offer explanations more or less probable.

Having made this remark, we are prepared to observe, that a number of explanations, as might be expected, and differing more or less from each other, have been given. One is, that credence in testimony is natural or constitutional; in other words is an elementary and original tendency of our being. The advocates of this opinion maintain, that the very nature of our mental constitution, independently of the suggestions of reasoning and experience, leads us to believe what men assert. We are so constituted, that the very first sound of the human voice, which reaches us, calls into action a disposition on our part to admit the truth of whatever intelligence it conveys.

In support of this view, which has in its favor the names of Reid and Campbell among others, reference is made to what we observe in children. In the earliest period of life, as soon as the first gleams of intelligence are visible, they look with hope and fondness to those, who support them; there seems to be no doubt, no suspicion, no want of confidence. This strong reliance discovers itself from time to time, as they advance towards youth; and, in the whole of the early part of our existence, is so distinct, strong, and operative, that men have given to it a specific name, in order to distinguish it from the more chastened credence of riper years. We speak of the caution and the convictions of manhood, and of the simplicity and CREDULITY of children.

It is further contended, that the principle of a natural reliance on the declarations of our fellow beings is involved in, and is indispensable to the propensity, which all philosophers admit man to have for society. This propensity will not be passed by without remark at some future time. It will suffice to observe here, that man is born in society, and is never out of it; society is his element; and a state of nature in the literal sense of the terms is only imaginary. When we think, therefore, of the wise Being, from whom man comes, and who cannot

be supposed to have placed him in his present situation without foresight and intention, we naturally conclude, that he is, and ever was designed for society, and that he is made meet for his destination.

But what is implied in a meetness for living together? What is requisite to preserve the bond, that binds in one families, and neighbourhoods, and states? Among other things, very evidently the principle in question; a confidence in men, a reliance on their statements.

§. 88. *Connection of a reliance on testimony with a disposition to utter the truth.*

Another explanation of the origin of the principle of credence, and somewhat different, has been given. The train of thought is this.—It requires but a little examination of ourselves to become satisfied, that it is according to the nature of men to speak the truth. Every person must be supposed to feel, that lying is not accordant with the original principles of his being; that every falsehood he tells degrades and diminishes him in his own eyes; that truth is the natural and appropriate result of the mind. This conviction is one of the earliest we have? but there is another not less early, and perhaps still more so in its origin, viz. our belief in the uniformity of the laws of nature.

Combining these two together, we are able to generalize, as it were, our own character. Sustained by the primary truth which has just been referred to, we are led to conclude, that what is humanity in ourselves is human nature in all, in whom we perceive the same outward likeness; in other words we promptly and unfailingly recognize in our own love of veracity a distinctive feature in the mental character of our fellow beings. Under these circumstances a reliance on human testimony is unavoidable. And it may be added, that this reliance, supposing it to have the origin, which has now been stated, exists and operates at a period so early as to answer all the purposes requisite in the forming and support of society.

§. 89. *This reliance greatly confirmed by experience.*

Others again ascribe the origin of the credence, which we give to testimony, to experience; that is to say, to our observation of a conformity in the reports of men to the facts alledged by them. Men make assertions; we find them to be true, and in this way we learn or acquire a confidence. But the difficulty is in reconciling this explanation with the very early period of life, in which the credence in question is known, in a greater or less degree, to manifest itself.

But whether this explanation of the origin of our reliance on testimony be admissible or not; it is certain, that experience or observation has much to do in strengthening it. At a period further back than we can now remember, we heard declarations, which our experience but seldom, and perhaps never found to be untrue. The truth was poured into our ears by the voice of affection; it became associated with parental love; as we look back we find it interwoven with all our earliest recollections, and inseparable from whatever we enjoyed, honoured, and reverenced.

If, therefore, reliance on men's testimony be truly a plant, naturally springing up in the soil of the human heart, it will be found to be nourished and sustained not only by experience, but by the influence of the most sacred remembrances.

§. 90. *Objections to our reliance on testimony.*

After all it may be inquired, whatever may be the fact of our reliance on testimony or of the origin of the same, whether this reliance be justly and properly placed? And in support of this inquiry, it may no doubt be asserted as an undeniable fact, that we are liable to be led into mistakes by the statements of our fellow men. This objection to the views, which have been given, merits some attention; and the answer to it may be summed up in two particulars.

First: the proportion of cases of deception, com-

pared with those where we are not deceived, is very small. Few persons are perhaps fully aware, to what extent, and in what numberless instances we rely upon the information and the assertions of others. "Every hour of our lives, (says Dr. Paley, Moral Philos. Bk. III. CH. V.) we trust to, and depend upon others; and it is impossible to stir a step, or, what is worse, to sit still a moment, without such trust and dependence. I am now writing at my ease, not doubting, (or rather never distrusting, and therefore, never thinking about it,) but that the butcher will send in the joint of meat, which I ordered; that his servant will bring it, that my cook will dress it; that my footman will serve it up; and that I shall find it upon the table at one o'clock. Yet have I nothing for all this but the promise of the butcher, and the implied promise of his servant and mine. And the same holds of the most important, as well as the most familiar occurrences of social life."

But are we wrong in relying on the declarations, both implied and express, in such cases as this, and in others similar? Certainly not. We may be deceived and disappointed sometimes, but not often, in comparison with the whole number of cases where we place reliance. Men are naturally disposed to speak the truth; it is much easier than to speak what is not true, for truth is at hand, but the practice of prevarication and mis-statement requires labour, and invention, besides conflicting with the general estimate of human character, and jarring violently upon every honourable sentiment within us. So capable is this view of being sustained, that even those men, who have brought upon themselves the infamy of being considered liars, probably utter the truth an hundred times, where they utter a falsehood once.

§. 91. *Further remarks on this objection.*

SECOND; Admitting, that we are liable to be led astray by means of testimony, still it is in our power, and is our duty to take suitable precautions against this liability, as in other cases. The errours, into which we are some-

times led from this source, are analagous to those, into which we are sometimes betrayed by means of the senses, and which, as they were found to be owing more to our own carelessness and haste than any thing else, were not thought sufficient to reject the senses from being considered grounds of belief and knowledge. In neither case are we exposed to errours without the means of guarding against them; and in respect to human testimony in particular we are by no means required to place implicit confidence in it, without a regard to the circumstances under which it is given, and the character and opportunities of the person who gives it. Every one knows, that there are in himself tendencies and principles, which, in certain circumstances, may be brought in conflict with the more ennobling principle of truth; and that he is liable to errour, even when he supposes himself to be seeking the truth, from the mere want of labor and care. And we may make use of this experience in judging of the testimony of others, since we may reasonably suspect in them the existence of similar tendencies, and similar want of circumspection. It is, therefore, consistent with any suitable degree of reliance on testimony to satisfy ourselves, whether the person who testifies, possessed ample means of information; whether he made use of those means; and whether he may not be under the influence of interest or passion.

CHAPTER SEVENTH.

LAWS OF BELIEF. (IV) MEMORY.

§. 92. *All men place a reliance on memory.*

In addition to the grounds of belief, which are to be found in consciousness, the senses, and testimony, we find another original occasion or law of the same in the Memory.—In our goings from place to place, and from one scene of action to another, in our meetings and conversations with men, and in our multiplied labours and relaxations, joys and sufferings, we see and hear and do what will perhaps afterwards never come within the range of our experience. When we subsequently act upon what has thus been once under the examination of the senses, or has in any other way come within our direct personal experience, we indicate our reliance on the remembrance. The thing itself has passed away ; but the remembrance of it remains ; and with the remembrance an unwavering belief, that the object of it once was. So far as we are confident, that the original perceptions are correctly reported in the remembrance, the latter controls our belief and actions not less certainly than those perceptions.

Says Dr. Beattie in some remarks on this subject, "The evidence of memory commands our belief as effectually as the evidence of sense. I cannot possibly doubt, with regard to any of my transactions of yesterday which I now remember, whether I performed them or not. That I dined to day, and was in bed last night, is as certain to me,

is that I at present see the colour of this paper. If we had no memory, knowledge and experience would be impossible; and if we had any tendency to distrust our memory, knowledge and experience would be of as little use in directing our conduct and sentiments, as our dreams now are. Sometimes we doubt, whether in a particular case we exert memory or imagination; and our belief is suspended accordingly: but no sooner do we become conscious, that we *remember*, than conviction instantly takes place; we say, I am certain it was so, for now I remember I was an eye witness."*

§. 93. *Limitations of our reliance on memory.*

It will be observed, that there is an express limitation of this general view in the remarks of the foregoing section. It is only when we have no reason to doubt of our original experiences being correctly reported in the remembrances, that our reliance on them is of the highest kind. It is the same here as in respect to the senses and testimony; we confidently rely on the memory, but are not exempt from some degree of exposure to errour from it; although as in those cases, it is an exposure, which we are able to guard against with suitable care and pains.

In what way, and in what particulars this caution and pains are to be exerted, it is not necessary minutely to detail here. One thing, however, seems to be in general certain, that we are not led into errour by means of the memory ignorantly, and without the ability to guard against it. Every man knows from a species of internal feeling, or at least is able to satisfy himself in some way, whether there be grounds for doubting his memory in any particular case or not. If it be the fact that he finds reason for suspecting its reports, his reliance will either be diminished in proportion to this suspicion, or he will take means, if he be able to, to remove the grounds of such suspicion.

* Beattie's Essay on Truth, Pt. I, Ch. II, §. 4.

It cannot reasonably be anticipated, that any objection will be made to the doctrine of a reliance on memory, with the limitation which has now been mentioned. Without such reliance, our situation would be no better at least, than if we had been framed with an utter inability to rely on Testimony; we could hardly sustain an existence; we certainly could not derive any thing in aid of that existence from the experience of the past.

§. 94. *Origin of men's reliance on memory.*

There remains, however, another inquiry, What is the origin of this confident reliance? What are the grounds of it? And the reply here is, as in many other cases; it is our nature, our mental constitution, the will and ordinance of the Being who created us. Whatever may be said on the subject, there must be, and there are certain original grounds, certain fundamental laws of belief, which, in every analysis of our knowledge, are fixed and permanent boundaries, beyond which we cannot proceed. And reliance on memory is one of them.

It cannot be said of this reliance, that it depends on experience, for the simple reason, that we cannot reason from experience, without first implying, and resorting to confidence in memory. The assumption of memory as a ground and law of belief is necessarily antecedent to all deduction. Nothing remains, therefore, but to repeat, that reliance on memory is a law of our nature, an ultimate principle and tendency of our mental being.

§. 95. *Memory the occasion of belief farther than what is actually remembered.*

There remains, however, a remark, relating to another topic connected with the memory, which is worthy of some attention, viz. That memory is an indirect ground of belief farther than what is actually remembered. If this remark be not obvious at first, it may be made so by some brief considerations.

Whatever may be the cause of it, it is very well known that a great portion of our knowledge exists in the shape

of general principles. To these principles we were originally led by trains of thought more or less long and intricate. But as in these trains of thought it was the results of them we chiefly sought after, it naturally happened, that the antecedent reflections and arguments were soon forgotten; and the conclusions only or general principles remained. It is the fact, however, that when we recal such general truths as control our belief and conviction, we at the same time believe, that facts and arguments, having a definite relation to these results, formerly existed, and were contemplated by the mind, although they have now irretrievably faded from our recollection.

For instance, in demonstrative reasoning, a man has proved to his entire conviction and satisfaction, that the three angles of a triangle are equal to two right angles; or in moral reasoning, has proved to equal satisfaction, that it is the duty of men to fulfil their promises. In these and similar cases, he subsequently not only relies on the remembrance of his having experienced a deep conviction of the general truth at a particular time, but the remembered conviction is the occasion of originating in him a firm reliance on what he does not remember, viz, on facts, comparisons, and arguments, which are now known to the mind only by the abstract conception of their antecedent existence, and of their suitableness, whatever they might have been, to produce such conviction.

CHAPTER EIGHTH.

LAWS OF BELIEF.

(V) RELATIVE SUGGESTION AND REASONING.

§. 96. *Meaning of Relative Suggestion and its connection with belief.*

ANOTHER ground or law of belief of such a nature, as to be entitled to a distinct consideration, is RELATIVE SUGGESTION. By this phrase, which has of late received a definite application in Mental Philosophy, is expressed the power or susceptibility, by means of which we perceive the relations of objects. What RELATIONS themselves are, it is unnecessary to attempt to define; no mere form of words can render the conception of them clearer to any person's comprehension, than it is already supposed to be. All, that needs be asserted, is the mere statement of the fact, that, when the mind contemplates two or more objects, we naturally put forth other perceptions or feelings; we cannot avoid doing it. For instance, we feel or perceive such objects to be the same or different, like or unlike, equal or unequal, cause or effect, whole or part, attribute or subject, &c.

These new feelings, as well as the direct perceptions of the objects, to which they relate, are occasions of belief. We not only believe the existence of the feelings themselves, but find ourselves unable to resist and exclude the belief of the actual existence and truth of that, to which they correspond. To employ a phraseology, which

seems to be coming into use, we believe in the *objective* reality of relations as well as in the *subjective* feelings, which interpret their existence and character to the mind. The relations of things, it is true, are not objects, directly addressed to the external senses; as we cannot directly see them, nor hear them, nor feel them, they seem comparatively obscure; and yet we are so constituted, that the cognizance of them is utterly inseparable from those perceptions, which we have both by means of the senses, and in any other way; they are perceivable by the mind, and are undoubtedly, in some important sense, real subjects of contemplation and knowledge.——It is in this way, that RELATIVE SUGGESTION, the name of the susceptibility, by means of which we become acquainted with relations, is a LAW OF BELIEF.

§. 97. *Classes of relations and intuitive perceptions of relation.*

The relations, which we are able to discover on a careful contemplation of objects, are almost innumerable, but attempts have been made, multiplied as they are, to reduce them to certain classes; for instance, to the general classes of Coexistence and Succession, and these again to the subordinate classes of position, resemblance or difference, degree, proportion, and the like.

But it is not necessary to enter into that inquiry here any further than to say, that some relations are more readily perceived than others. The mind may hesitate, in some cases, in perceiving or feeling the relation of cause and effect, of proportion, of subject and attribute; but this is not the case in general with those of agreement or disagreement, similitude or dissimilitude. The mind is so prompt in perceiving these relations, in ascertaining the agreement or difference, the identity or diversity of objects, that its perceptions in such cases are frequently distinguished by a distinctive name, and are termed INTUITIVE. There is no delay, no perplexity in perceiving, that red is not white, or that a square is not a circle, but the mind has a knowledge of the relations here at once, and

without the intervention and help of any other ideas.

Mr. Locke happily remarks in respect to perceptions of this sort, that like bright sunshine they force themselves immediately to be perceived, as soon as ever the mind turns its view in the direction of them, and leave no room for hesitation and doubt.

§. 98. *Of the intuitive perceptions called axioms.*

It is proper to remark here, that certain intuitive perceptions, when without reference to particular cases they are considered in the abstract, and are embodied in words, are termed AXIOMS; such as The whole is greater than a part; Things equal to the same are equal to one another; From equals take away equals, and the remainders are equal.

It must be evident to every one, that if the mind had been so constituted as to be incapable of putting forth the feelings implied in axioms, there could have been no mathematical deduction and demonstration. It is the power of Relative Suggestion, exerted in originating these intuitive perceptions, which enables the mind in the abstract sciences to go on from step to step, till it arrives at last at the most remote and difficult conclusions.

§. 99. *Of reasoning as a ground of belief.*

What has just been said leads us to remark further in general terms, that all Reasoning, both Moral and Demonstrative, and in whatever form it exists, is a law of belief. But it is proper to observe, by way of explaining the introduction of this subject in this particular connection, that every train of reasoning implies, and involves a series of felt or perceived relations. These feelings of relation may be regarded as the links, which bind together such separate perceptions, facts, or truths, as come within the range of the subject reasoned upon, and without which they would inevitably remain in their original state of insulated and unavailable propositions. Truth is added to truth, feeling arises successive to feeling, until we arrive at the conclusion, which invariably fixes our belief.

The conclusion is properly a mere feeling of relation; but it is one, which could not have existed without the preceding steps, without a succession of propositions; and in that point of view, Reasoning may properly be considered a ground of belief, distinct from Relative Suggestion.

When, however, we assert, that the conclusions, deduced from a process of reasoning, invariably influence our belief, we should particularly keep in mind here, that belief may exist in very various degrees. When the successive feelings, which we have in a train of reasoning, are all intuitive, and the propositions, with which we commenced, were certain, or were assumed as such, belief is of course of the highest kind. And this is always the case in demonstrations; for there we always begin either with known or assumed truths, and as the propositions compared together are entirely abstract, there seems to be no room for doubt or mistake. But in moral reasoning, although the mental process is the same, the conclusion is not necessarily true; the propositions contemplated are in general of a different character from what we find in demonstrative reasoning; and the conclusion will vary from mere presumption to absolute certainty according to the nature of the facts laid before the mind.

§. 100. *Evidence that men confide in the results of reasoning.*

But is it a fact, that Reasoning necessarily controls our convictions in any case? What evidence is there, that our belief, in a greater or less degree, is naturally dependent on its conclusions?—If we can suppose such a question to be seriously put, a prompt and satisfactory answer is to be found in the general, and in individual experience. No man has it in his power to refuse obedience to the decisions of reasoning; nor does he ever do it, except from an inability to embrace at once, and to balance the successive steps of the process. On this point it is useless to delay; a few words will be enough.

If this principle, that reason is naturally fitted to cause

and control belief, be not true, we may sit down and read Euclid's Elements and Newton's Principia, and after all reject every conclusion, to which they come; we may study the profound orations of the great ancient orators, and still entertain the idea, that Philip's character was not dangerous to Greece, nor that of Cataline to the Roman republic; we may read the speeches of the classic names of the British Parliament, without a recognition of the base and iniquitous abomination of the Slave trade; in a word we shall act rightfully and consistently in defacing the diagrams of mathematicians, in destroying the charters of scientific corporations, in shutting the halls of justice, and in disbanding the legislative assembly.

Independently of the consequent belief, the power of reasoning loses its value, and is gone forever: Where there is no reasoning, there is of course no deliberation, no eloquence, no knowledge of any kind, except what is directly and intuitively possessed.

CHAPTER NINTH.

LAWS OF ASSOCIATION. (I) PRIMARY LAWS.

§. 101. *Meaning of association and extent of its applications.*

Our thoughts and feelings follow each other in a regular train. Of this statement no one needs any other proof, than his individual experience. We all know, not only that our minds are susceptible of new states, but what is more, that this capability of new states is not fortuitous, but has its laws. Therefore, we not only say, that our thoughts and feelings succeed each other, but that this antecedence and sequence is in a *regular* train. To this regular and established consecution of the states of the mind we give the name of MENTAL ASSOCIATION.

And it is proper to suggest here, that this part of our constitution is worthy of the most attentive consideration. Although at present all we have to do is to consider its general nature and its laws, many portions of our subsequent inquiries will help to illustrate its particular applications, its extent, and power. It exerts its influence on almost every thought; it binds its efficacy on almost every emotion. Whatever the time or place, the period of life, the allotment of rank or degradation, of joy or suffering, of sad solitude or bustling notoriety, it makes no difference; it never fails to found its empire, and to put forth its supremacy, wherever there is an intellect to contemplate, and a heart to feel. "When I was travelling

through the wilds of America, (says the eloquent Chateaubriand,) I was not a little surprized to hear, that I had a countryman established as a resident, at some distance in the woods. I visited him with eagerness, and found him employed in pointing some stakes at the door of his hut. He cast a look towards me which was cold enough, and continued his work, but the moment I addressed him in French, he started at the recollection of his country, and the big tear stood in his eye. These well known accents suddenly roused in the heart of the old man, all the sensations of his infancy. In youth we little regret the pleasures of our first years; but the further we advance into life the more interesting to us becomes the recollection of them; for then every one of our days presents a sad subject of comparison."*

§. 102. *Of the term Association and its general laws.*

The term, ASSOCIATION, is perhaps preferable to any other. It may, with no little appearance of reason, be objected to the word, SUGGESTION, which has sometimes been employed, that it seems to imply a positive power or efficiency of the preceding state of the mind in producing the subsequent. But of the existence of such an efficiency we have no evidence. All that we know is the fact, that our thoughts and feelings, under certain circumstances, appear together and keep each other company;—And this is what is understood to be expressed, and is all, that is expressed, by the term ASSOCIATION.

By the Laws of association, we mean no other than the general designation of those circumstances, under which the regular consecution of mental states, which has been mentioned, occurs. The following may be mentioned as among the primary, or more important of those laws, although it is not necessary to take upon us to assert either that the enumeration is complete, or that some better arrangement of them might not be proposed, viz., RESEMBLANCE, CONTRAST, CONTIGUITY in time and place, and CAUSE and EFFECT.

* Chateaubriand's recollections of Italy, England, and America.

§. 103. *Resemblance the first general law of association.*

New trains of ideas and new emotions are occasioned by resemblance; but when we say, that they are occasioned in this way, all that is meant is, that there is a new state of mind, immediately subsequent to the perception of the resembling object. Of the efficient cause of this new state of mind under these circumstances, we can only say, the Creator of the soul has seen fit to appoint this connection in its operations, without our being able, or deeming it necesssary to give any further explanation. A traveller, wandering in a foreign land, finds himself in the course of his sojournings in the midst of aspects of nature not unlike those, where he has formerly resided, and the fact of this resemblance becomes the antecedent to new states of mind. There is distinctly brought before him the scenery, which he has left, his own woods, his waters, and his home.——The emperor Napoleon, whose present cares might be supposed to have broken the chain of thought and feeling, that bound him to the past, is said to have once expressed himself thus. "Last Sunday evening, in the general silence of nature, I was walking in these grounds, (of *Malmaison*.) The sound of the church-bell of Ruel fell upon my ear, and renewed all the impressions of my youth. I was profoundly affected, such is the power of early associations and habit; and I considered, if such was the case with me, what must be the effect of such recollections upon the more simple and credulous vulgar?"*

The result is the same in any other case, whenever there is a resemblance between what we now experience, and what we have previously experienced. We have been acquainted, for instance, at some former period with a person, whose features appeared to us to possess some peculiarity, a breadth and openness of the forehead, an uncommon expression of the eye, or some other striking mark; —to day we meet a stranger in the crowd, by which we are surrounded, whose features are of a somewhat

*Scott's Life of Napoleon, vol. III. ch. XXXIV.

similar cast, and the resemblance at once vividly suggests the likeness of our old acquaintance.

§ 104. *Resemblance in every particular not necessary.*

It is not necessary, that the RESEMBLANCE should be complete in every particular, in order to its being a principle or law of association. It so happens, (to use an illustration of Brown,*) that we see a painted portrait of a female countenance, which is adorned with a ruff of a peculiar breadth and display; and we are, in consequence, immediately reminded of queen Elizabeth. Not because there is any resemblance between the features before us and those of the English sovereign, but because in all the painted representations, which we have seen of her, she is uniformly set off with this peculiarity of dress, with a ruff like that, which we now see. Here the resemblance between the suggesting thing and that, which is suggested, is not a complete resemblance, does not exist in all the particulars, in which they may be compared together, but is limited to a part of the dress.

That a single resembling circumstance, (and perhaps one of no great importance,) should so readily suggest the complete conception of another object or scene, which is made up of a great variety of parts, seems to admit of some explanation in this way. We take, for example, an individual;—the idea, which we form of the individual is a complex one, made up of the forehead, eyes, lips, hair, general figure, dress, &c. These separate, subordinate ideas, when combined together and viewed as a whole, have a near analogy to any of our ideas, which are compounded, and are capable of being resolved into elements more simple. When, therefore, we witness a ruff of a size and decoration more than ordinary, we are at once reminded of that ornament in the habiliments of the British queen; and this on the ground of resemblance.—But this article in the decorations of her person is the foundation of only one part of a very complex state of mind, which embraces the features and the general appearance. As there has been a long continued co-exist-

* Brown's Philosophy of the Human Mind, Lect. xxxv.

ence of those separate parts, which make up this complex state, the recurrence to the mind of one part or of one idea is necessarily attended with the recurrence of all the others. They sustain the relation of near friends; they form a group, and do not easily and willingly admit of a separation. The principle, which maintains in the relation of co-existence such states of the mind, as may be considered as grouped together, is the same with that, which so steadily and permanently combines the parts of what Mr. Locke calls mixed modes or other complex ideas, and is no less effectual in its operation.

§. 105. *Of resemblance in the effects produced.*

Resemblance operates, as an associating principle, not only when there is a likeness or similarity in the things themselves, but also when there is a resemblance in the *effects*, which are produced upon the mind.

The ocean, when greatly agitated by the winds, and threatening every moment to overwhelm us, produces in the mind an emotion, similar to that, which is caused by the presence of an angry man, who is able to do us harm. And in consequence of this similarity in the effects produced, they reciprocally bring each other to our recollection.

Dark woods, hanging over the brow of a mountain, cause in us a feeling of awe and wonder, like that, which we feel, when we behold, approaching us, some aged person, whose form is venerable for his years, and whose name is renowned for wisdom and justice. It is in reference to this view of the principle, on which we are remarking, that the following comparison is introduced in Akenside's Pleasures of the Imagination.

——— "Mark the sable woods,
"That shade sublime yon mountain's nodding brow;
"With what religious awe the solemn scene
"Commands your steps! As if the reverend form
"Of Minos or of Numa should forsake
"The Elysian seats, and down the embowering glade
"Move to your pausing eye."

As we are so constituted, that all nature produces in

us certain effects, causes certain emotions, similar to those, which are caused in us in our intercourse with our fellow-beings, it so happens that, in virtue of this fact, the natural world becomes living, animated, operative. The ocean is in *anger*; the sky *smiles*; the cliff *frowns*; the aged woods are *venerable*; the earth and its poductions are no longer a dead mass, but have an existence, a soul, an agency.

We see here the foundation of metaphorical language; and it is here, that we are to look for the principles, by which we are to determine the propriety or impropriety of its use.

In every metaphor there is some analogy or resemblance; it is a comparison or simile in its most concise form. There is an examination instituted; and circumstances of similitude are detected; not however, by a long and laborious process, but in a single word. Hence it is the language of strong emotion; and as such, is peculiarly the language of uncivilized nations, and, in general of the most spirited parts of the poetry of those, that are civilized.

§. 106. *Contrast the second general or primary law.*

Contrast is another law or principle, by which our successive mental states are suggested; or in other terms, when there are two objects, or events, or situations of a character precisely opposite, the idea or conception of one is immediately followed by that of the other. When the discourse is of the *palace* of the king, how often are we reminded, in the same breath, of the *cottage* of the peasant! And thus wealth and poverty, the cradle and the grave, hope and despair, are found in public speeches and in declamations from the pulpit almost always going together and keeping each other's company. The truth is, they are connected together in our thoughts by a distinct and operative principle; they accompany each other, not because there is any resemblance in the things thus associated, but in consequence of their very marked contrariety. Darkness reminds of light, heat of cold, friendship of en-

mity; the sight of the conqueror is associated with the memory of the conquered, and when beholding men of deformed and dwarfish appearance, we are at once led to think of those of erect figure or of Patagonian size. Contrast, then, is no less a principle or law of association, than resemblance itself.

Those writers, who succeed in giving a natural delineation of human action and suffering, furnish illustrations of the operation of this principle. In one of those interesting sketches, which acquaint us with the wants, captivities, and sufferings of the early settlers of this country, there is the following instance of association by contrast.—"As I lifted the unsavoury morsel, says the afflicted subject of the Narrative, with a trembling hand to my mouth, I cast my thoughts back a few days to a time, when from a board plentifully spread in my own house, I ate my food with a merry heart. The wooden spoon dropped from my feeble grasp. The *contrast* was too affecting." *

Scott remarks of certain unhappy Italians, who were among the victims of Napoleon's dreadful retreat from Russia, being overcome by extreme fatigue, exposure, and the severity of the cold, that their thoughts, when perishing so miserably, must have been on their own mild and delicious country.

Count Lemaistre's touching story, entitled, from the scene of its incidents, THE LEPER OF AOST, illustrates the effects of the principle of association now under consideration. Like all persons infected with the leprosy, the subject of the disease is represented as an object of dread no less than of pity to others, and while he is an outcast from the society of men, he is a loathsome spectacle even to himself. But what is the condition of his mind? What are the subjects of his thoughts? The tendencies of his intellectual nature prevent his thinking of his wretchedness alone. His extreme misery aggravates itself by suggesting scenes of ideal happiness, and his mind revels in a paradise of delights, merely to give greater intensity to his actual woes by contrasting them with his imaginary bliss.

* Narrative of the Captivity, &c. of Mrs. Johnson.

—"I represent to myself continually (says the Leper) societies of sincere and virtuous friends; families, blessed with health, fortune, and harmony. I imagine, I see them walk in groves, greener and fresher than these, the shade of which makes my poor happiness; brightened by a sun more brilliant than that, which sheds its beams on me;—And their destiny seems to me as much more worthy of envy in proportion as my own is the more miserable."

§. 107. *Contiguity the third general or primary law.*

Those thoughts and feelings, which have been connected together by nearness of time and place, are readily suggested by each other; and, consequently, contiguity in those respects is rightly reckoned, as another and third primary law of our mental associations. When we think of Palestine, for instance, we very readily and naturally think of the Jewish nation, of the patriarchs, of the prophets, of the Savior, and of the apostles, because Palestine was their place of residence, and the theatre of their actions. So that this is evidently an instance, where the suggestions are chiefly regulated by proximity of place. When a variety of acts and events have happened nearly at the same period, whether in the same place or not, one is not thought of without the other being closely associated with it, owing to proximity of time. If therefore, the particular event of the crucifixion of the Savior be mentioned, we are necessarily led to think of various other events, which occurred about the same period, such as the treacherous conspiracy of Judas, the denial of Peter, the conduct of the Roman soldiery, the rending of the veil of the temple, and the temporary obscuration of the sun.

The mention of Egypt suggests, the Nile, the Pyramids, Cæsar, Cleopatra, the battle of Aboukir. The naming of the AMERICAN REVOLUTION immediately fills the mind with recollections of Washington, Greene, and many of their associates, whose fortune it was to enlist their exertions in behalf of freedom in the same country and at the same period.

The following passage from captain King's continuation of Cook's last voyage furnishes a remarkable example of the operations of this principle;—"While we were at dinner in this miserable hut, on the banks of the river, Awatska, and the guests of a people, with whose existence we had before been scarce acquainted, and at the extremity of the habitable globe, a solitary, half-worn, pewter spoon, whose shape was familiar to us, attracted our attention; and on examination, we found it stamped on the back with the word, LONDON. I cannot pass over this circumstance in silence out of gratitude for the many pleasant thoughts, the anxious hopes, and tender remembrances it excited in us. Those, who have experienced the effects, that long absence, and extreme distance from their native country produce in the mind, will readily conceive the pleasure such a trifling incident can give." The beauty of this illustration consists not so much in the city or place having been suggested in consequence of their seeing its name impressed on the pewter spoon, although this may be supposed to have happened on the principle of contiguity, as in the circumstance, that such a multitude of other pleasing recollections thronged around the memory of that place. When they thought of London, they thought of their homes; they thought of the inmates of those homes; they thought of a thousand incidents which they had there witnessed; a striking illustration of the degree of importance, which may be accumulated on the most trivial circumstance, when that circumstance can be made to connect itself effectually with any general principles of our mental constitution.

That, which we have set down, as the third primary law of mental association, is more extensive in its influence than any others. It has been remarked with truth, that proximity in time and place forms the whole calendar of the great mass of mankind. They pay but little attention to the arbitrary eras of chronology; but date events by each other, and speak of what happened at the time of some dark day, some great eclipse, some war or revolution, or when one neighbour built a house, or another's was destroyed.

§. 108. *Cause and effect the fourth primary law.*

There are certain facts or events, which hold to each other the relation of invariable antecedence and sequence. That fact or event, to which some other one sustains the relation of constant antecedence, is in general called *an effect*;—And that fact or event, to which some other one holds the relation of invariable sequence, has in general the name of a *cause*. Now there may be no resemblance in the things, which reciprocally bear this relation, there may be no contrariety, and it is by no means necessary, that there should be contiguity in time or place, as the meaning of the term, contiguity, is commonly understood. There may be CAUSE and EFFECT without any one or all of these circumstances. But it is a fact, which is known to every one's experience, that when we think of the cause in any particular instance, we naturally think of the effect, and, on the contrary, the knowledge or recollection of the effect brings to mind the cause;—And in view of this well known and general experience, there is good reason for reckoning CAUSE and EFFECT among the primary principles of our mental associations. What we here understand by principles or laws will be recollected viz. The general designation of those circumstances, under which the regular consecution of mental states occurs.

It is on the principle of cause and effect, that when we see a surgical instrument, or any engine of torture, we have an idea of the pain, which they are fitted to occasion, and for a moment are tempted to imagine, that we ourselves are partially the subjects of it. The sight of a wound, inflicted however long before, suggests to us the instrument, by which it was made. When we witness any of our fellow beings in distress, we naturally think of the particular cause of it, if we know what it is; and if we are ignorant, we make it a subject of inquiry. When we have good news to communicate, we please ourselves with the thought of the joy, which it will occasion, and the bearer of afflictive tidings cannot but anticipate the grief, which the annunciation of them will produce.

CHAPTER TENTH.

LAWS OF ASSOCIATION. (II) SECONDARY LAWS.

§. 109. *Of secondary laws and their connection with the primary.*

THE subject of Association is not exhausted in the enumeration and explanation of its Laws, which has thus far been given. Besides the PRIMARY LAWS, which have fallen under our consideration, there are certain marked and prominent circumstances, which are found to exert, in a greater or less degree, a modifying and controlling influence over the more general principles. As this influence is of a permanent character, and not merely accidental and temporary, the grounds or sources of it are called, by way of distinction, SECONDARY LAWS.

These, which we are now to consider, will probably appear at first sight to be more numerous than they are in fact. It is undoubtedly somewhat difficult to make out a just and unalterable designation of them. Nevertheless it is believed, that on a careful examination, their multiplicity will be lessened, and that they will be found to be but four in number; viz, lapse of time, degree of coexistent feeling, repetition or habit, and original or constitutional difference in character.

It must at once be obvious, that these principles, although holding a subordinate rank, give an increased range and power to the PRIMARY laws. It is not to be in-

The operation of this law is seen constantly in particular arts and professions. If men be especially trained up to certain trades, arts, and sciences, their associations on those particular subjects and on every thing connected with them, are found to be prompt and decisive. We can but seldom detect any hesitancy or mistake within the circle, where their minds have been accustomed to operate, because every thought and process have been recalled and repeated thousands of times. With almost every thing they see or hear there is a train of reflection, connecting it with their peculiar calling, and bringing it within the beaten and consecrated circle. They seem unable to free themselves from an influence, which has grown with their growth, and strengthened with their strength. Every hour, unless they guard against it, hastens the process, which threatens to cut them off, and insulate them from the great interests of humanity, and to make them wholly professional.

It is proper to add, that the result of repetition, which is indicated here, is not limited to association. This is only one of the numerous applications of the great LAW OF HABIT, which will soon be separately considered.

§. 112. *Of the secondary law of co-existent emotion.*

A third secondary law is CO-EXISTENT EMOTION.—It may be stated in other words as follows; The probability, that our mental states will be recalled by the general laws will in part depend on the depth of feeling, the degree of interest, which accompanied the original experience of them.

Why are bright objects more readily recalled than faint or obscure? It is not merely because they occupied more distinctly our perception, but because they more engaged our attention and interrested us, the natural consequence of that greater distinctness. Why do those events in our personal history, which were accompanied with great joys and sorrows, stand out like pyramids in our past life, distinct to the eye, and immovable in their position, while others have been swept away, and cannot be

found? Merely because there were joy and sorrow in the one case, and not at all, or only in a slight degree, in the other; because the sentient part of our nature combined itself with the intellectual; the heart gave activity and vigour to the understanding.

We learn from a revered and ancient Book, that the Jews could not forget Jerusalem, the Holy City, the gates of Zion, that they loved so well. And why not? How did it happen that in their Captivity they sat down by the rivers of Babylon, wept when they remembered Zion, and hung their harps on the willows? It was, because the features of Jerusalem were not mere outlines, addressed to the cold, unquickened perception; but every lineament was wreathed with love; every gate and street and dwelling-place and temple waxed bright and beautiful in the midst of pure and pleasant recollections; the Holy city was not a mere abstraction of the head; its image was pictured and written on the heart.

§. 113. *Original difference in the mental constitution.*

The fourth and last secondary law of association is ORIGINAL DIFFERENCE IN THE MENTAL CONSTITUTION.—This Law, it will be noticed, is expressed in the most general terms; and is to be considered, therefore, as applicable both to the intellectual and the sentient part of man. It requires accordingly to be contemplated in two distinct points of view.

The law under consideration holds good, in the first place, in respect to original differences of emotion or feeling, or as it is more commonly expressed, of disposition. It will help to make us understood, if we allude briefly, in this part of the subject, to two different classes of persons. One of the descriptions of men, which we have now in view, is composed of those, for such are undoubtedly to be found, who are of a pensive and melancholy turn. From their earliest life they have shown a fondness for seclusion, in order that they might either commune with the secrets of their own hearts, or hold intercourse, undisturbed by others, with whatever of impressiveness and

sublimity is to be found in the works of nature. The other class are naturally of a lively and cheerful temperament. If they delight in nature, it is not in solitude, but in the company of others. While they seldom throw open their hearts for the admission of troubled thoughts, they oppose no obstacles to the entrance of the sweet beams of peace and joy and hope.

Now it is beyond question that the primary laws of association are influenced by the constitutional tendencies, manifest in these two classes of persons; that is to say, in the minds of two individuals, the one of a cheerful, the other of a melancholy or gloomy disposition, the trains of thought will be very different. This difference is finely illustrated in those beautiful poems of Milton, L'ALLEGRO and IL PENSEROSO. L'ALLEGRO or the cheerful man finds pleasure and cheerfulness in every object, which he beholds;—The great sun puts on his amber light, the mower whets his scythe, the milk-maid sings,

"And every shepherd tells his tale
"Under the hawthorn in the dale.

But the man of melancholy disposition, IL PENSEROSO, chooses the evening for his walk, as most suitable to the temper of his mind; he listens from some lonely hillock to the distant curfew, and loves to hear the song of that "sweet bird,

——That shun'st the noise of folly,
"Most musical, most melancholy.

Further;—Our trains of suggested thoughts will be modified by those temporary feelings, which may be regarded, as exceptions to the more general character of our dispositions. The cheerful man is not always cheerful, nor is the melancholy man at all times equally sober and contemplative. They are known to exchange characters for short periods, sometimes in consequence of good or ill health, or of happy or adverse fortune, and sometimes for causes which cannot be easily explained. So that our mental states will be found to follow each other, with a succession, varying not only with the general character of

our temper and dispositions, but with the transitory emotions of the day or hour.

§. 114. *The foregoing law as applicable to the intellect.*

The law of original difference in the mental constitution is applicable, in the second place, to the intellect, properly and distinctively so called; in other words to the comparing, judging, and reasoning part of the soul. There is a difference in men in this respect, as well as in their feelings and dispositions, although it is perceptible in different degrees, and in some cases hardly perceptible at all. One person, for instance, has from childhood exhibited a remarkable command of the relations and combinations of numbers; another exhibits in like manner an uncommon perception of uses, adaptations, and powers, as they are brought together, and set to work in the mechanic arts; another has the power of generalizing in an uncommon degree, and having obtained possession of a principle in a particular case, which may appear to others perfectly and irretrievably insulated, he at once extends it to hundreds, and thousands of other cases.

It is perhaps unnecessary to delay here, for the purpose of confirming what has now been said, by a reference to the history of individuals. A slight acquaintance with literary history will show, that diversities of intellect, such as have been alluded to, have been frequent. Such diversities are undoubtedly to be considered as implied in all instances of genius. When we are told, that one man has a genius for mathematics, another for poetry, that the genius of one lays in politics, and of another in the mechanic arts, we naturally inquire, What genius is? Nor are we able to learn, that it is any thing more than the constitutional difference we have been considering, combined perhaps with a strong curiosity; in other words, it is essentially and chiefly a natural tendency and quickness in forming associations on the principles of resemblance, of contrast, and of cause and effect. The history of the human mind does not authorize us to expect of men, whose associations are originally and prevailingly

formed on the law of mere contiguity in time and place, which seems to be the case with a great portion of mankind, that they will add new beauties to literature or new truths to science. How often had the husbandman seen the apple fall to the ground without even asking for the cause? But when Newton saw the fall of an apple, he not only asked for the cause, but having conjectured it, at once applied it to every thing in like circumstances around him, to all the descending bodies on the earth's surface. Here was a mind, not merely great by toil, but constitutionally great and inventive. How much more so then, when he lifted up the principle of gravitation from the surface of the earth to the stars of heaven, and showed its universality, and proved, that the furthest and mightiest planet is governed in the same way as the smallest particle of dust beneath our feet!

All the laws of association may properly be given here in a condensed view. The PRIMARY or general laws are RESEMBLANCE, CONTRAST, CONTIGUITY in time and place, and CAUSE and EFFECT. Those circumstances, which are found particularly to modify and control the action of these, are termed SECONDARY laws, and are as follows, Lapse of time, Repetition or habit, Co-existent feeling, and Constitutional difference in mental character.

§. 115. *Of associations suggested by present objects of perception.*

There remains another point of view, in which it seems proper, that the subject of association should be contemplated, before we leave it.—Associated thoughts and emotions, when made to pass through the mind by some sound, which the ear has caught, by some object, which has met the eye, or any present object of perception whatever, are peculiarly vivid and strong. Associations, which do not admit of any of our present perceptions as a part of the associated train, cannot but impress us, as being in some measure airy and unsubstantial, however distinct. We deeply feel, that they are part of the experiences of departed days and which, in departing from

us, have become almost, as if they had never been. But let them partake of our present experience, and of what we now feel and know to exist, and they seem to gain new strength; the remembrances are not only distinct, but what was airy and unsubstantial fades away, and they have life, and power, and form.

How often in the wanderings of life, are we led by some apparently accidental train of thought to the recollection of the residence of our early years and of the incidents, which then occurred! The associations are interesting, but we find it difficult to make them permanent, and they are comparatively faint. But let there be connected with the train of thought the present sound of some musical instrument, which we then used to hear, and of our favorite tune, and it will be found, that the reality of the tune blends itself with the airy conceptions of the mind, and, while we kindle with an illusive rapture, the whole seems to be real. Some illustrations may tend to make these statements more clear, and to confirm them.

Is is related in one of the published Lectures of Dr. Rush, that an old native African was permitted by his master a number of years since, to go from home in order to see a lion, that was conducted as a show through the state of New Jersey. He no sooner saw him, than he was so transported with joy, as to express his emotions by jumping, dancing, and loud acclamations, notwithstanding the torpid habits of mind and body, superinduced by half a century of slavery. He had known that animal, when a boy in his native country, and the sight of him suddenly revived the memory of his early enjoyments, his native land, his home, his associates, and his freedom.

There is in the same writer another interesting instance of the power of association, in which he himself had a part, and which will be given in his own words.—"During the time I passed at a country-school, in Cecil County, in Maryland, I often went on a holiday, with my schoolmates, to see an eagle's nest, upon the summit of a

dead tree in the neighbourhood of the school, during the time of the incubation of that bird. The daughter of the farmer, in whose field this tree stood, and with whom I became acquainted, married, and settled in this city about forty years ago. In our occasional interviews, we now and then spoke of the innocent haunts and rural pleasures of our youth, and, among other things, of the eagle's nest in her father's field. A few years ago I was called to visit this woman, when she was in the lowest stage of a typhus fever. Upon entering her room, I caught her eye, and, with a cheerful tone of voice, said only, '*The eagle's nest.*' She seized my hand, without being able to speak, and discovered strong emotions of pleasure in her countenance, probably from a sudden association of all her early domestic connections and enjoyments with the words I had uttered. From that time she began to recover. She is now living, and seldom fails, when we meet, to salute me with the echo of the 'eagle's nest.' "

§. 116. *Causes of increased vividness in the foregoing instances.*

From such illustrations it would seem to be sufficiently clear, that, whenever associated thoughts and emotions are connected with any present perceptions, they are peculiarly strong and vivid. They steal into all the secret chambers of the soul, and seemingly by some magic power impart a deep intensity to its feelings, and give to the fleeting world of memory the stability of real existence. There are two causes, why such associated feelings should possess more than ordinary strength and vividness.

(1) The particular train of thought and feeling, which is excited in the mind, continues longer than in other cases, in consequence of the greater permanency and fixedness of the present objects of perception, which either suggested the train or make a part of it. So long as the lion was permitted to remain in the sight of the aged African, so long without interruption was the series of delightful thoughts kept up within him. The bright images, which threw him into such raptures, and awoke stu-

pidity itself, were not fleeting away with every breath, but remained permanent.

The sick lady of Philadelphia saw the physician, with whom she had been acquainted in the early part of life. By the mention of the eagle's nest, he vividly recalled the scenes of those young days. But it was the presence of the person, whose observation had given rise to the train of association, which contributed chiefly to keep it so long in her thoughts. Had it occurred merely from some accidental direction of her own mind, without any present object, which had made a part of it, no doubt her sufferings or other circumstances would soon have banished it.

(2) The second cause of the increased vividness of associations, suggested by a present object of perception or combined with it, is this, viz. The reality of the thing perceived is communicated in the illusion of the moment to the thing suggested. The trees of the desert were the hiding place of the lion, when the African saw him in early life; and now after the lapse of so many years, he imagines, that, in the quickened eye of his mind he beholds the forests of his native soil, because he has before him the proud and powerful animal, that crouched under their shade. And the presence of the monarch of the forest gives a reality not only to woods and deserts; but by a communication of that, which exists to that, which is merely suggested, the whole group of his early experiences of whatever kind, so far as they are recalled, virtually acquire a like truth and reality.

These remarks may be properly applied to explain a recent strong manifestation of feeling in a whole people. The citizens of the United States have a multitude of patriotic associations, connected with their revolutionary war. But those associations, owing to length of time, were by degrees growing dim on the minds of the aged, and made a still more diminished impression on those of the young. In the years eighteen hundred twenty-four and five, La Fayette, the only surviving revolutionary

* Rush's Introductory Lectures. xi.

officer of the grade of major-general came from France on a visit to this country to see once more the people, for whom he had fought in his youth. All classes flocked to behold him, and to grasp his hand. Nothing could exceed the deep feeling, which existed from one part of the republic to the other. But it was not the individual merely, however strongly the people were attached to him, that awoke such a happy and lofty enthusiasm. All the events and all the characters of the revolution exist to the present generation in associated states of the mind, and, as La fayette had long formed a part in those ideal associations, when we were so fortunate, as to see him with our own eyes and touch him with our own hands, the Revolution seemed in a new sense to be real, and all its scenes were *embodied* before us. All his associates in suffering and danger, all the renowned names that once fought by his side, were concentred in himself. The reality of the living seemed to spread itself into the shadowy images of the dead; and thus the presence of this distinguished individual created not only a virtual re-existence, but a virtual presence for those revolutionary worthies, who are destined to maintain a cherished and permanent resting-place in the hearts of American citizens. It is in this deep and fond illusion, that we are, in part at least, to seek for the cause of the overwhelming emotion, which was exhibited.

In all the cases, which have been mentioned, the associated feelings were intensely powerful; a multitude of other instances, occurring indeed every day, illustrate the same idea, that they are strong and vivid in an unusual degree, when suggested by, or combined with a present object of perception. The two circumstances, which have been mentioned, seem to be the most obvious and satisfactory reasons, which can be given in explanation of the fact.

CHAPTER ELEVENTH.

LAW OF HABIT.

§. 117. *General view of the law of habit and of its application.*

THERE is another great law of the mind, distinct from those which have been mentioned, which requires in this connection a separate and particular consideration, that of Habit. This important law of our constitution may be stated in general terms as follows; *That the mental action acquires facility and strength from repetition or practice.* The fact, that the facility and the increase of strength, implied in HABIT, is owing to mere repetition, or what is more frequently termed practice, we learn, as we do other facts and principles in relation to the mind, from the observation of men around us, and from our own personal experience. And as it has hitherto been found impracticable to resolve it into any general fact or principle more elementary, it may be justly regarded as something ultimate and essential in our nature.

The term Habit, by the use of language, indicates the facility and strength, acquired in the way which has been mentioned, including both the result and the manner of it. As the law of habit has reference to the whole mind of man, the application of the term, which expresses it, is of course very extensive. We apply it to the dexterity of workmen in the different manual arts, to the rapidity of the accountant, to the coup d'œil or eye-glance of

the military engineer, to the tact and fluency of the extemporaneous speaker, and in other like instances.——We apply it also in cases, where the mere exercise of emotion and desire is concerned; to the avaricious man's love of wealth, the ambitious man's passion for distinction, the wakeful suspicions of the jealous, and the confirmed and substantial benevolence of the philanthropist..

It is remarkable, that the law under consideration holds good in respect to the body, as well as the mind. In the mechanical arts and in all cases, where there is a corporeal, as well as mental effort, the effect of practice will be found to extend to both. Not only the acts of the mind are quickened and strengthened, but all those muscles, which are at such times employed, become stronger and more obedient to the will. Indeed the submission of the muscular effort to the volition is oftentimes rendered so prompt by habit, that we are unable distinctly to recollect any exercise of volition, previous to the active and muscular exertion. It is habit, which causes that peculiarity of attitude and motion, so easily discoverable in most persons, termed their gait; it is habit also, which has impressed on the muscles, immediately connected with the organs of speech, that fixed and precise form of action, which in different individuals gives rise, in part at least, to characteristic peculiarities of voice. The habit in the cases just mentioned is both bodily and mental, and has become so strong, that it is hardly possible to counteract it for any length of time.—But it will be necessary in the remainder of this chapter to limit our considerations chiefly to Habit, considered as a law of our mental nature.

§. 118. *Illustrations of the law of habit.*

There will be occasion in almost every part of this Work, to illustrate and confirm this law. We shall scarcely advance a step in any part of our inquiries, without being called upon to contemplate increased evidence of its extent and power. It seems proper, however, to introduce in this place some further instances in illustra-

tion of its existence and nature; remarking at the same time that we discuss the subject here only in part and imperfectly, as we should otherwise anticipate remarks, which will more suitably offer themselves on subsequent occasions.

If a person, for instance, make it a practice to recall words which have a similar sound, this particular form of association will by degrees be so strengthened, that in the end it will be by no means difficult to secure the recurrence of such words. This is the true explanation of the power of rhyming. It is well known, that most persons, whether they posess poetical genius or not, may acquire this power, by continuing for a length of time their search after words of a like termination. But this case of increased facility of association answers to the alleged result of the law under consideration; and is an instance, and at the same time an illustration, and proof of HABIT.

Again, if a public speaker have fixed in his mind certain permanent principles, which are to guide him in the division and subdivision of his discourse, he acquires by practice a readiness in respect to them, and immediately applies them to every subject of debate. By means of the habit which he has formed, he is not only enabled to resolve a subject into suitable parts, but to pass without hesitation or danger of mistake from one part of it to another; whereas a person, who has not formed this habit is perpetually at a loss; he advances and retreats, goes over the ground again and again, and involves himself in inextricable confusion.

But take an instance of a little different kind, which, however, not less clearly shows what results may be expected from practice.——"I sometimes amuse myself, [says Dr. Priestly,] with playing on a flute, which I did not learn very early, so that I have a perfect remembrance, that I exerted an express voluntary power every time that I covered any particular hole with my finger. But though I am no great proficient on the instrument, there are some tunes which I now very often play without ever attending to my fingers, or explicitly to the tune. I have even

played in concert, and, as I was informed, perfectly in tune, when I have been so absent, that, except at the beginning, I did not recollect that I had been playing at all."

In this case it was necessary to establish an association between certain positions of the fingers and the emission of certain sounds, indicated by the musical notes. The union thus formed was at first both weak, and slow and lingering in its results. It gradually acquired strength and facility by repetition; that is, a HABIT of association was formed.

But there may be not only a habit of association, such as is evident in the instances, which have been now mentioned; the results of this law are found also in sensation and perception, in imagination and reasoning, and in other parts of our purely intellectual nature, as we shall be led to see in the progress of our inquiries.

§. 119. *Application of this law to feelings or emotions.*

The existence of the same great law of our nature may be detected also in the operations of the emotions and passions.——An unfavourable suspicion is indulged by one individual in respect to another; this suspicion, instead of being effectually examined and checked, is permitted to return; it often arises, and is found to gain strength from the mere repetition, until it is converted, by the accession of strength it has received, into positive dislike, and sometimes into hatred.——The feeling of benevolence is subjected to the same general law. If this feeling be exposed to a continued system of repression, it becomes so broken down and weakened, that at last objects of suffering entirely cease to affect us. But on the contrary, if it be indulged, it will gain strength; it will become more and more ready and effective in its operation.—The case of the philanthropic Howard may be regarded as a proof of this. The feeling of benevolence was undoubtedly strong, when he first set out on his great and noble employment of visiting prisons and prisoners. But the record of his life is believed to justify the assertion, that the feeling increased by repetition, that it grew brighter and bright-

er, more and more intense, until, like the fire of the Vestals, it burnt perpetually in his bosom.

It is happy for us, in the inquiries of mental philosophy, if we can confirm what inquisitive men have been able to discover in their closets by an insight into the mental history of common life; by a reference to the experiences, habits, and prejudices of those, who make no pretensions to skill in books. Nor are confirmations of the principles of this science less valuable, when they are given by scholars, whose calling it is to write upon other subjects, but who at times let fall an incidental testimony in respect to them. Thus in a work of the first President Adams is the following passage, which confirms the views of this section; "The passions are all unlimited; nature has left them so; if they could be bounded, they would be extinct, and there is no doubt they are of indispensible importance in the present system. They certainly increase too, by exercise, like the body; the love of gold grows faster than the heap of acquisition; the love of praise increases by every gratification, till it stings like an adder and bites like a serpent, till the man is miserable every moment he does not snuff the incense; ambition strengthens at every advance, and at last takes possession of the whole soul so absolutely, that the man sees nothing in the world of importance to others, or himself, but in his object."*

*Adam's Defence of the Constitutions of the United States, Vol. I. p. 129—Philad. Ed.

CHAPTER TWELFTH.

SIMPLICITY AND COMPLEXNESS OF MENTAL STATES.

§. 120. *Origin of the distinction of mental states as simple and complex.*

BEFORE leaving the subject of those more general laws by which the action of the mind is so essentially sustained and guided, there remains one topic further to be briefly examined: it is the existence of our mental states as Simple and Complex.——This subject, which has been more than once already alluded to, and which will hereafter be frequently made the basis of remarks, holds a prominent place in the writings of Mr. Locke. He early introduces it into the Essay on the Understanding, and seems to recur to it with peculiar pleasure; frequently separating thought and feeling into their elementary parts, balancing one state of mind with another, and estimating their comparative value. It cannot, therefore, be passed by without some examination, and perhaps no opportunity will present itself more favorable on all accounts than the present. And in truth, if the views which are to be maintained on this subject be correct, it is no misapplication of language, although it may have the appearance of being an uncommon phraseology, to speak of the principle involved in them, as a law of our mental nature.

On entering into this subject, the first inquiry is, Whether the consideration of our mental states as simple

and complex is a just and a proper one? And in reference to this inquiry, it is an obvious remark, that, in looking at our thoughts and feelings, as they continually pass under the review of our internal observation, we readily perceive, that they are not of equal worth; we do not assign to them the same estimate; one state of mind is found to be expressive of one thing only, and that thing, whatever it is, is precise, and definite, and inseparable; while another state of mind is found to be expressive of, and virtually equal to many others. And hence we are led not only with the utmost propriety, but even by a sort of necessity, to make a division of the whole body of our mental affections into the two classes of SIMPLE and COMPLEX. Nature herself makes the division; it is one of those characteristics, which gives to the mind, in part at least, its greatness; one of those elements of power, without which the soul could not be what it is, and without a knowledge of which it is difficult to possess a full and correct understanding of it in other respects.

§. 121. *Of the general nature of simple mental states.*

We shall first offer some remarks on those mental states, which are simple, and shall aim to give an understanding of their nature, so far as can be expected on a subject, the clearness of which depends more on a reference to our own personal consiousness, than on the teachings of others.

Let it be noticed then in the first place, that a simple idea CANNOT BE SEPARATED INTO PARTS.—It is clearly implied in the very distinction between simplicity and complexity, considered in relation to the states of the mind, that there can be no such separation, no such division. It is emphatically true of our simple ideas and emotions, whether the remark will hold good of any thing else or not, that they are one and indivisible. Whenever you can detect in them more than one element, they at once lose their character of simplicity and become complex, however they may have previously appeared. Inseparableness consequently is their striking characteristic; and

it may be added, that they are not only inseparable in themselves, but are separate from every thing else. There is nothing, which can stand as a substitute for them where they are, or represent them where they are not; they are independent unities, constituted exclusively by the mind itself, having a specific and positive character, but nevertheless known only in themselves.

§. 122. *Simple mental states not susceptible of definition.*

Let it be observed, in the second place, that our simple notions CANNOT BE DEFINED.—This view of them follows necessarily from what has been said of their oneness and inseparableness, compared with what is universally understood, by defining. In respect to definitions it is undoubtedly true, that we sometimes use synonymous words for the same thing, and give it the name of defining, but it is not properly such. It is expected in defining, and is implied in the meaning of the term itself, that the subject will be made clearer, but this is never done directly by the use of synonymous terms, and oftentimes is not done by them in any way.

In every legitimate definition, the idea, which is to be defined, is to be separated, as far as may be thought necessary, into its subordinate parts; and these parts are to be presented to the mind for its examination, instead of the original notion, into which they entered. This process must be gone through in every instance of accurate defining; this is the general and authorized view of definition; and it is not easy to see, in what else it can well consist.

But this process will not apply to our simple thoughts and feelings, because if there be any such thing as simple mental states, they are characterized by inseparableness and oneness. And, furthermore, if we define ideas by employing other ideas, we must count upon meeting at last with such as shall be ultimate, and will reject all verbal explantion; otherwise we can never come to an end in the process.—So that the simple mental affections are not only undefinable in themselves; but, if there

were no such elementary states of mind, there could be no defining in any other case; it would be merely analysis upon analysis, a process without completion, and a labour without end; leaving the subject in as much darkness as when it was begun.

§. 123. *Means of obtaining a knowledge of our simple notions.*

Although nothing is more clearly settled in Mental Philosophy, than the existence of simple ideas, characterized by their inseparableness and unity, and that they are of course undefinable, the objection is sometimes made, that this doctrine leaves that part of our knowledge in great obscurity. As we are utterly unable to make them any clearer by definition, and by merely using other words, some persons may profess not to understand what is meant by the terms, extension, solidity, heat, cold, red, sweet, unity, desire, pleasure, existence, power, and other names of our simple thoughts and feelings.——If there is a difficulty here, it will be likely to remain so; we must take our nature as it is, in all its essential and original features, and are unable to alter it. But the truth is, there is no difficulty; as a general statement, the simple mental states are more clear and definite to our comprehension than others, notwithstanding their undefinableness. They are the direct offspring of nature, and it is not often that she leaves her own work unformed, darkened, and indefinite.

In those few instances, however, (for such may perhaps be found,) where there happens to be a degreee of mental obscurity, resting on them, we are able to assist the conceptions of others, by a statement of the circumstances, as far as possible, under which the simple idea exists. And having done this, we can merely refer them to their own senses, their own consciousness and personal experience, as the only teacher, from which they can expect to receive any tolerable satisfaction. Simple ideas and feelings derive both their existence and character from the constitution of the mind itself; in the event and issue of

their inquiries, the mind alone, as it comes under their own inspection, can tell them, what they are.

§. 124. *Origin of complex notions and their relation to simple.*

Our simple notions, which we have thus endeavoured to explain, were probably first in origin. There are reasons for considering them as antecedent in point of time to our complex mental states, although in many cases it may not be easy to trace the progress of the mind from the one to the other. The complex notions of external material objects embrace the separate and simple notions of extension, hardness, colour, taste, and others. As these elementary parts evidently have their origin in distinct and separate senses, it is but reasonable to suppose, that they possess a simple, before they are combined together in a complex existence. Simple ideas, therefore, may justly be regarded as antecedent in point of time to those, which are complex, and as laying the foundation of them

Hence we see, that it is sufficiently near the truth, and that it is not improper, to speak of our complex ideas, as derived from, or made up of simple ideas. This is the well known language of Mr. Locke on this subject; and when we consider how much foundation there is for it in the constitution and operations of the human mind, there is good reason for retaining it.

Although purely simple ideas and emotions are few in number, vast multitudes of a complex nature are formed from them. The ability, which the mind possesses of originating complex thoughts and feelings from elementary ones, may be compared to our power of uniting together the letters of the alphabet in the formation of syllables and words.

§. 125. *Of the precise sense in which complexness is to be understood.*

But while we distinctly assert the frequent complexness of the mental affections, it should be particularly kept in mind, that they are not to be regarded in the light of a material compound, where the parts, although it may

sometimes appear to be otherwise, necessarily possess no higher unity than that of juxtaposition, and of course can be literally separated from each other, and then put together again. There is nothing of this kind; neither putting together, nor taking asunder, in this literal and material sense. But if our thoughts and feelings are not made up of others, and are not complex, in the material sense of the expressions, what then constitutes their complexness? This inquiry gives occasion for the important remark, that complexness in relation to the mind is not literal, but virtual only. What we term a complex feeling is in itself truly simple, but at the same time is equal to many others and is complex only in that sense. Thought after thought, and emotion following emotion, passes through the mind; and as they are called forth by the operation of the laws of association, many of them necessarily have relation to the same object. Then there follows a new state of mind, which is the result of those previous feelings, and is complex in the sense already explained. That is to say, it is felt by us to possess a virtual equality to those separate antecedent thoughts and emotions. Our simple feelings are like streams coming from different mountains, but meeting and mingling together at last in the common centre of some intermediate lake; the tributary fountains are no longer separable; but have disappeared, and become merged and confounded in the bosom of their common resting place. Or they may be likened to the cents and dimes of the American coinage, tens and hundreds of which are represented by a single EAGLE; and yet the eagle is not divided into a hundred or thousand parts, but has as much unity as the numerous pieces, for which it stands.

The language, which expresses the composition and complexity of thought, is, therefore, to be regarded as wholly metaphorical, when applied to the mind, and is not to be taken in its literal meaning. We are under the necessity of employing in this case, as in others, language which has a material origin, but we shall not be led astray by it, if we carefully attend to what has been said, and endeavour

to aid our conception of it by a reference to our internal experience.

§. 126. *Illustrations of analysis as applied to the mind.*

The subject of the preceding section will be the better understood by the consideration of Analysis as applicable to the mind. As we do not combine literally, so we do not untie or separate literally; as there is no literal complexness, so there is no literal resolution or analysis of it. Nevertheless we have a meaning, when we speak of analyzing our thoughts and feelings. And what is it? What are we to understand by the term analysis?

Although this subject is not without difficulty, both in the conception, and in the expression of it, it is susceptible of some degree of illustration.—It will be remembered, that there may be analysis of material bodies. The chemist analyzes, when he takes a piece of glass which appears to be one substance, and finds, that it is not one, but is separable into silicious and alkaline matter. He takes other bodies and separates them in the like manner; and whenever he does this, the process is rightly called analysis.

Now we apply the same term to the mind; but the thing expressed by it, the process gone through, is not the same. All we can say is, there is something like this. We do not resolve and separate a complex thought, as we do a piece of glass or other material body into its parts; we are utterly unable to do it, if we should seriously make the attempt; every mental state is in itself and in fact simple and indivisible, and is complex only virtually. Complex notions are the results, rather than the compounds of former feeling; and though not literally made up of parts, have the relation to them, which any material whole has to the elements composing it; and in that particular sense may be said to comprehend or embrace the subordinate notions. Mental analysis accordingly concerns merely this relation. We perform such an analysis, when, by the aid of our reflection and consciousness, we are able to indicate those separate and subordinate feelings, to which, in our conception of it, the complex mental state is virtually equal.

The term GOVERNMENT, for instance, expresses a complex feeling; we may make this feeling, which is in fact only one, although it is virtually more than one, a subject of contemplation, and we are said to analyze it, when we are able to indicate those separate and more elementary notions, without the existence and antecedence of which, it could not have been formed by the mind. We do not literally take the complex state in pieces, but we designate other states of mind which, every one's knowledge of the origin of thought convinces him, must have preceded it, such as the ideas of power, right, obligation, command, and the relative notions of superiour and inferiour.

CHAPTER THIRTEENTH.

GENERAL CLASSIFICATION.

§. 127. *The mental states divided into intellectual and sentient.*

WHAT has hitherto been said has aided in preparing the way for the consideration of the mental acts, exercises, or states. And with the consideration of this topic, is necessarily connected the examination of the susceptibilities or powers, to which they owe their origin, or with the action of which they are intimately combined. This is a vast subject, beset with many perplexities, but which, it is hoped, will be rendered more easy and simple, by having taken out from it, and considered separately the topics, which have hitherto come under our notice.

One cause of perplexity in the inquiries, on which we are next to enter, is, that our mental states often closely resemble each other in their characteristics, or are much intermingled in other ways and for other causes, and that hence it is often difficult to separate and class them. But it is obviously impossible to consider them in the mass, for that would lead to utter confusion; it is impossible also to consider them individually, for that would be labour without end; there must be a classification of some kind either more or less general. With this object, therefore, in view, we make the various exercises of the mind the subject of our contemplation, and the result of this

examination, is, that we find them susceptible of a generic arrangement, the outlines of which, whatever may be true in respect to its details, have been universally detected. The arrangement to which we refer, is that of the division of the mental states into Intellectual and Sentient.

§. 128. *Evidence in favour of this classification from what we observe in men generally.*

We find some evidence of the propriety of this general arrangement, of this partitioning, if we may so speak, of our mental nature, in the conduct and characters of men, as they pass under our observation. The classification in question is not merely to be found in books; it is not the work of mere scholars; but it is clearly recognized in the language and conduct of men generally. Those men without education, who merely express what they feel, without any formal attempt at analyzing their feelings, have observed, and detected, and asserted it. How common it is for them to refer to occasions, where in their own method of expressing it, their understandings were convinced, but their hearts were not affected! And do they not unconsciously indicate in such language the line of demarcation, which the Creator of the mind has drawn between its intellectual and sentient nature? Nor is this remark of trifling consequence. It is no small evidence of the existence of the generic distinction under consideration, when we find it acknowledged by the unlettered, as well as by the mere scholar. The elements of human nature were not given stintedly and by measure; they were not apportioned out to those, on whom the favours of rank and learning happened to be conferred, to the exclusion of the poor and ignorant, but beam in every human countenance, and speak even in the language of the outcast and degraded slave.

But there are other men, who furnish a lesson on this subject. If we look among those, who are allowedly possessed of the highest intellectual attainments and culture, we shall not unfrequently observe in two men a per-

fect likeness in the intellect, but an utter discrepancy in the heart. Both possess clearness of perception, resources of knowledge, eminent powers of reasoning, and all in equal degree. What then? The heart of the one, (the SENTIENCE, if it were allowed so to speak,) is all kindness, truth, and justice; he is an Aristides, a Washington, earnestly seeking to do good, and incapable of intentionally doing wrong; while that of the other is the den and loathsome lodging place for envy, falsehood, cruelty, deceit, and every evil thing.

Look at the individuals who compose Congresses and Parliaments, and other select and established congregations of great men; take the measurement of their knowledge, the guage of their intellectual invention; and many will be found, showing the same compass, and bearing an equality of impress. Then turn from the intellect, and look into that better and higher sanctuary of the soul, which is the residence of the feeling, the hope, the desire, the moral sentiment, and it will require no remarkable gift of perception to discover a difference in those, who in the other respect were essentially equal. One is endeavouring to crush the powerless, another is too high-minded to bruise a broken reed; one acts wholly for himself, another for his country; one feels for his country and that is all, another adds to his love of country the love of mankind; one will sell his vote for two farthings, another will sooner part with his right hand or right eye, than break his agreement with his honour and conscience.

Now we feel at liberty to build up a conclusion in view of these facts. We deem ourselves warranted in deducing the inference, that there is in man's mind a combination of nature. Something is meant when we use the word UNDERSTANDING in distinction from the HEART. There is a sentient, as well as an intellectual constitution; there are cognitive powers, and there are susceptibilities of emotion.

§. 129. *This classification frequently recognized in writers.*

Although on this subject we have looked to the unlettered multitude, and men of business and action first, we are by no means to exclude mere men of letters, and to hold their testimony, in whatever way it may be given, as unimportant. Literary writers of eminence for the most part clearly recognize, either directly or indirectly, the generic arrangement, which has been proposed. It is perhaps unnecessary to make the remark, that Locke, although he did not limit himself to one class of subjects, took for his principle and prominent topic the INTELLECT; the title page of his great work intimates this; it reads, An Essay concerning Human Understanding; but Edwards, who was animated with the hope of seeing men brought nearer to their Creator, selected the higher part of human nature as the great object of his inquiries, and treated of the Will and the Affections. Mr. Stewart professedly extended his inquiries, and at some length, to both parts of our constitution. He alludes in very clear terms to the distinction between them in the introduction of his Philosophy of the Active and Moral Powers.——"In my former work on the Human Mind (he remarks) I confined my attention almost exclusively to Man, considered as an *intellectual being*; and attempted an analysis of those faculties and powers, which compose that part of his nature commonly called his *intellect* or his *understanding*."

But it is not to professed writers on these subjects, that we would refer in this case; the distinction is made by authors, who cannot be supposed to have ever studied the mind as a science. The Roman Historian indicates it, when he informs us, that Mutius Scævola purposely consumed his hand in the fire, and meanwhile exhibited outwardly as little sensibility to suffering, as if his intellect were separated from the power of feeling, (quam quum velut alienato ab sensu torreret animo.) It is indicated also by a later historian of the same great nation, when he says of Cataline, (fuit magna vi animi, sed ingenio malo pravoque,) that he possessed a vigorous intellect,

but in his disposition was evil and depraved. And we might ask, What historian or poet, of any age or people, has given a faithful sketch of man for any length of time, without being compelled to recognize the same distinction, in what they so uniformly inform us of the strivings of the judgment against the passions, and of the passions against the judgment?

§. 130. *Languages referred to in proof of this generic arrangement.*

It is further worthy of notice, that there is a multitude of words in the various dialects of men, which have a relation to the arrangement before us. In our own language, when the discourse relates to our sentient constitution, we employ the terms, feelings, emotions, desires, passions, affections, inclinations, and the like; but when it relates to the understanding, we employ another set of words, viz, perceptions, thoughts, notions, ideas, intellectual states, &c.——It is true, there are other terms of a more general nature, (as when we speak of the states, acts, or exercises of the mind,) which are applied to both classes indiscriminately, but those, which have been mentioned, are commonly restricted in their application, and are not, as a general statement, interchanged with each other.

Well may we conclude, therefore, inasmuch as language is designed by the framers of it to be a sort of representative of the mind, that the great distinction, which has now been laid down, is well founded. The existence of these distinct classes of terms, which were not framed without an object, and without an adequate reason, cannot be accounted for, except on the ground, that there is a corresponding distinction in the mind's acts. And if there be a distinction in the acts or exercises, there is of course a distinction in the mind itself, a twofold nature, the outlines of which, we again venture to assert, will not fail to discover themselves in every individual, in whom the elements of humanity exist in so high a degree as to render him an object of notice at all.

On any other grounds, what shall we make of the ex-

pressions, which have been already referred to in eminent writers? What shall we say, (to take a single instance out of the multitude, that might be brought together,) of the following language of a learned critic,* in relation to a speech of Mr. Fox in Parliament, on the great question of the Slave Trade:—"It is among the happiest productions of a rapid and vigorous INTELLECT, called into action suddenly by the warmth of an honest and noble HEART. The FEELING seems all INTELLECT; the INTELLECT all FEELING."

§. 131. *The nature of this classification a matter of consciousness.*

The classification, which we are considering, is the more important, because it is founded, not in the mere circumstances attending the origin of the mental states, but in the nature of the states themselves. We feel, we know them to be different. But when we are required to state with precision what the actual difference is between these two classes of the exercises of the soul, it cannot be denied, that the question is more readily proposed, than answered. A man may believe and know himself, (it is very often the case,) what he may find it difficult to communicate, and explain to others. An inability to set forth in words the nature of any particular acts of the soul is not a proof, that those exercises do not exist, or that the condition of one state of the mind does not differ from that of another.

On the contrary it may be answered in this case, as in others, that every person knows from his CONSCIOUSNESS, that great and ultimate guide which Providence has given men, that there is not only a difference, but a radical and essential difference between the two classes.

No one, for instance, can be supposed to be insensible of this diversity in the mental states, expressed by the terms, truth, belief, certainty, order, equality, and the like, and those, expressed by the terms, pleasure, pain, hope,

* Edin. Review on Clarkson's History of the Abolition of the Slave Trade, July 1808.

desire, love, &c. We refer, therefore, on this point to each one's internal experience, to his own consciousness.

"Every man, [says Condillac, Origin of Knowledge, Pt. I. CH. I,] is conscious of his thought; he distinguishes it perfectly from every thing else; he even distinguishes one thought from another; and that is sufficient. If we go any further, we stray from a point, which we apprehend so clearly, that it can never lead us into errour."

§. 132. *Of the different names given to it.*

It remains to be remarked further, that the explicit and scientific statement of this classification is by no means new; on the contrary, in its essential features, it has repeatedly made a formal appearance under various names. Some of these designations will be briefly referred to.

I, Cognitive and Motive.——A long time since, it was proposed, particularly by Mr. Hobbes, to employ these two words, as expressive of the general division under consideration. Undoubtedly the epithet COGNITIVE, whether we consult its etymology or its meaning as established by use, is sufficiently applicable to that part of our mental nature, which regards the mere origin of knowledge, as perception, judgment, reasoning, &c. The term MOTIVE, as indicative of the other part of our mental constitution, was probably adopted on the ground, that our emotions, desires, and passions are particularly connected with movement or action. This nomenclature seems not, however, to have been generally adopted.

"The terms *cognitive* and *motive*, [says Mr. Stewart, Elements, Pt. II,] were long ago proposed for the same purpose by Hobbes; but they never appear to have come into general use, and are indeed liable to obvious objections."

II, The Understanding and Will.——The generic classification, which we have been considering, has made its appearance also under these names. We have already had occasion to refer to Locke and Edwards; those distinguished writers not only recognized the classification in question, and made it the basis of the particular direc-

tion of their great efforts, but frequently employed this phraseology as expressive of it. Under the term Understanding was included the whole intellectual, the thinking and reasoning part of our nature. By the Will seems to have been meant that ability, in whatever way it might exhibit itself, which was supposed to be necessary in bringing the mental constitution into action; it was the mind's impelling and controlling principle; something which moved and governed it. To determine precisely, however, what feelings and operations belonged to the one and what belonged to the other was by no means a matter well settled, but of no small doubt and contention. The designation of the arrangement by these names has consequently fallen into comparative discredit. The word Understanding, however, is still employed in its original extent, as synonymous with intellect; the word Will, with a much restricted signification.

III, Intellectual and Active Powers.——For the epithet MOTIVE proposed by Hobbes, the term Active has been substituted by some modern writers, particularly Reid and Stewart. This epithet, like that for which it was substituted, was probably introduced on the ground, that the sentient part of our nature is immediately and particularly connected with motion, effort, or action. It is probably not meant to be intimated by those who adopt this designation, that the feelings and powers, included under it, possess in themselves more activity than others, but are active in the sense of being particularly connected with, and leading to action; which is undoubtedly the truth.

§. 133. *Classification of the intellectual states of the mind.*

For the reasons, which have been given, we find ourselves authorized, in the first place, in considering the states, exercises, or acts of the mind, (for these terms, the most general we can employ, will apply to both classes,) under the two general heads of Intellectual and Sentient. Our intellectual states of mind, together with their corresponding susceptibilities and powers, will first come under consideration. On looking attentively, however, at

the intellectual part of our nature, we readily discover, that the results, which are to be attributed to it, are susceptible of a subordinate classification, viz, into INTELLECTUAL STATES of External, and those of Internal origin.

It is presumed, that on a little examination this distinction will be sufficiently obvious. If the mind were insulated and cut off from the outward world, or if there were no such outward world, could we feel, or see, or hear? All those mental affections, which we express, when we speak of the diversities of taste and touch, of sound and sight, are utterly dependent on the existence and presence of something, which is exteriour to the intellect itself. But this cannot be said of what is expressed by the words, truth, falsehood, opinion, intelligence, cause, obligation, effect and numerous creations of the intellect of a like kind.

It is worthy of remark, that the subordinate classification, which is now proposed to be made, did not escape, in its essential characteristics, the notice of very ancient writers. We have the authority of Cudworth,* that those intellectual states, which have an internal origin, bore among the Greeks the name of NOEMATA, *thoughts* or *intellections*; while those of external origin were called AISTHEMATA, *sensations*. Although this classifiation, the grounds of which cannot fail readily to present themselves, has been recognized and sanctioned, in some form or other, by numerous writers on the human mind, some future opportunity will be found more fully to explain and defend it; the objections, which have been made, will not be overlooked; and it will be readily perceived, that we shall be the better prepared for this proposed explanation, after having considered the relation, which the mind sustains to the external world by means of the senses, and analyzed the knowledge, which has its origin in that source.

* Cudworth's Immutable Morality, Bk. IV. CH. 1.

PART SECOND.

INTELLECTUAL STATES OF THE MIND.

CLASS FIRST.

INTELLECTUAL STATES OF EXTERNAL ORIGIN.

CHAPTER FIRST.

ORIGIN OF KNOWLEDGE IN GENERAL.

§. 131. *Of the mind considered in itself.*

HAVING arrived at this point in our inquiries, where we are to start forth on a new track, it is natural to cast a glance back on the road we have gone over; and it is no exaggeration to say, that we have found grounds of admiration and encouragement in what has fallen under our notice. We have seen undoubted proof of the greatness of the mind, of the variety of its elementary resources, and of its essential excellence; and yet we have only gone round it like casual visiters; we have merely seen the outlines and boundaries; we have counted the towers and bulwarks at a distance; and can hardly say, that we have opened the gates, and entered into the inner part of the city.

The mind of man may be contemplated in itself. As a matter of speculation, such a view of it will do no harm; although in point of fact, the mind never was, and never can be separated from the relations it sustains to every part of the universe, and to the great Creator of the Universe. As a mere matter of speculation however, we may direct our attention to it, considered as separate from every thing else; and there will be found to be something pleasing and exalting in such contemplations. If we suppose its powers to be in their strength and ac-

tivity, and at the same time exclude the consideration of every thing exteriour, which might be imagined to be the cause of this activity, the mind has the appearance of being a self-supplying, and original energy. It seems to us like the sun in the heavens, a perpetual fountain-head of illumination, streaming outward in every direction, and overflowing all things with brightness.

Plato among the ancients, and Malebranche among the moderns seem to have been pleased with taking this view; those peculiar traits of thought, which are ascribed to them, may be accounted for in part on the ground of a great retirement into themselves, and a predominant love of interiour inspection. And certainly to a serious and contemplative mind, there is something peculiarly fascinating in this course. When men are sick of the world without, as they often find occasion to be, there is always a world within, in which they can seclude themselves. In the indulgence of this inward retirement, they have an opportunity not only to search out the mind's hidden treasures of thought, emotion, and energy, but to contemplate also the marks and signatures of that divine and more glorious Intelligence from whom it came.

§. 135. *Connection of the mind with the material world.*

But after all, the speculations referred to in the last section will be likely to lead us astray, and to give a distorted view of the mind, if they are pursued too far, or are not limited, and guarded with sufficient care. An entire separation of the soul and its action from every thing else is merely a supposition, an hypothesis, which is not realized in our present state of being. What the soul will be in a future state of existence is of course another inquiry. It is possible, that it may be disburdened, more than it is in this life, of connections and dependencies, and will possess more freedom and energy; but it seems to be our appropriate business at present to examine it, as we find it here.

Whatever Providence may have in reserve for us in a future state, it is obvious, that in our present existence it

has designed, and established an intimate connection between the soul, and the material world. We have a witness of this in the mere fact of the existence of an external creation. Was all this visible creation made for nought? Are the flowers not only of the wilderness, but of the cultivated place, formed merely to waste their sweetness on the desert air? Are those harmonical sounds and ravishing touches, that come forth from animate and inanimate nature, uttered, and breathed out in vain? Can we permit ourselves to suppose, that the symmetry of form, every where existing in the outward world, the relations and aptitudes, the beauties of proportion, and the decorations of colours exist without any object? And yet this must be so, if there be no connection between the soul of man and outward objects. What would be proportion, what would be colour, what would be harmony of sound without the soul, to which they are addressed, and from which they are acknowledged to derive their efficacy? Where there is no soul, where there is a deprivation and want of the conscious spirit, there is no sight, no hearing, no touch, no sense of beauty. Every thing depends on the mind; the senses are merely the medium of communication, the conditions and helps of the perceptions, and not the perceptions themselves.

With such considerations we justify what has been said that Providence designed, and established an intimate connection between the soul, and the material world.

And there is another train of thought, which leads to the same conclusion. On any other supposition than the existence of such a connection, we cannot account for that nice and costly apparatus of the nerves and organs of sense, with which we are furnished. Although we behold on every side abundant marks of the Creator's goodness, we may safely say, he does nothing in vain. The question then immediately recurs, What is the meaning of the expenditure of the Divine goodness in the formation of the eye, in the windings and ingenious construction of the ear, and in the diffusion of the sense of

touch? We cannot give a satisfactory answer to this question, except on the ground, that there is a designed and established connection between the mind, and the material world. If we admit the existence of this connection, every thing is at once explained.

§. 136. *Of the origin or beginnings of knowledge.*

The Creator, therefore, established the relation between mind and matter; and it is a striking and important fact, that, in this connection of the mental and material world, we are probably to look for the commencement of the mind's activity, and for the beginnings of knowledge. The soul considered, in its relationship to external nature, may be compared to a stringed instrument. Regarded in itself, it is an invisible existence, having the capacity and elements of harmony. The nerves, the eye, and the senses generally are the chords and artificial frame-work, which God has woven round its unseen and unsearchable essence. This living and curious instrument, which was before voiceless and silent, sends forth its sounds of harmony, as soon as it is swept by outward influences. But this, it will be noticed, is a general statement; the meaning may not be perfectly obvious, and it will be necessary to descend to some particulars.

There are certain elementary notions, which seem to be involved in, and inseparable from our very existence, such as self, identity, &c. The supposition would be highly unreasonable, that we can exist for any length of time without possessing them. It is certain, that these notions are among the earliest, which men form; and yet cautious and judicious inquirers into the mind have expressed the opinion, that even these do not arise, except subsequently to an impression on the organs of sense.

Speaking of a being, whom, for the sake of illustration, he supposes to be possessed of merely the two senses of hearing and smelling, Mr. Stewart makes this remark. —"Let us suppose then a particular sensation to be excited in the mind of such a being. The moment this happens he must necessarily acquire the knowledge of two

facts at once; that of the existence of the *sensation*, and that of *his own existence*, as a sentient being."* This language clearly implies, that the notions of existence and of person or self are attendant upon, and subsequent to an affection of the mind, caused by an impression on the senses. In his Essays he still more clearly and decisively advances the opinion, that the mind is originally brought into action through the medium of the senses, and that human knowledge has its origin in this way.——"All our simple notions, (he says, Essay III,) or, in other words, all the primary elements of our knowledge are either presented to the mind immediately by the powers of consciousness and perception, or they are gradually unfolded in the exercise of the various faculties, which characterize the human understanding. According to this view of the subject, the sum total of our knowledge may undoubtedly be said to *originate* in sensation, inasmuch as it is by impressions from without, that consciousness is first awakened, and the different faculties of the understanding put in action."†

Perhaps this subject, however, will always remain in some degree of doubt; and we have merely to say, that of the various opinions, which have been advanced in respect to it, we give the preference to that which has been referred to, as supported by Stewart, De Gerando, and other judicious writers, without any disposition to assert its infallibility. The mind appears at its creation to be merely an existence, involving certain principles, and endued with certain powers, but dependent for the first and original developement of those principles and the exercise of those powers on the condition of an outward impression. But after it has once been brought into action, it finds new sources of thought and feeling in itself.

*Philosophy of the Human Mind, Vol. I, CH. 1. See also §.§. 17, 18 of this Work.

†Views, similar to those of Mr. Stewart, are maintained by De Gerando in a memoir, entitled *De la Generation des Connoisances Humaines*.

§. 137. *Our first knowledge in general of a material or external origin.*

If we know not how a single leaf is formed, and are baffled, when we attempt to explain the growth even of a blade of grass, it is not surprising, that we should fail of absolute certainty in explaining the first cause of the mind's action, and the history of the first feeling, to which it gives birth. But whatever may be true of the first mental exercise, whether its existence be dependent on the condition of some external impression on the senses or not, it may be shown beyond doubt, that during the early period of life the connection of the mind with the material world is particularly close, and that far the greater portion of its acts and feelings can be traced to that source.

I,—What has been said will, in the first place, be found agreeable to each one's individual experience. If we look back to the early periods of life, we discover not merely, that our ideas are then comparatively few in number, but that far the greater proportion of them are suggested by external objects. They are forced upon us by our immediate wants; they have relation to what we ourselves see, or hear, or touch; and only a small proportion are internal and abstract. As we advance in years, susceptibilities and powers of the mind are brought into exercise, which have a less intimate connection with things external; and thoughts from within are more rapidly multiplied, than from without. We have in some measure exhausted that which is external, and as the mind, awakened to a love of knowledge and a consciousness of its powers, has at last been brought fully into action, by means of repeated affections of the senses, a new world, (as yet in some degree a TERRA INCOGNITA,) projects itself upon our attention, where we are called upon to push our researches, and gratify our curiosity.—This is the general experience, the testimony, which each one can give for himself.

In the second place, what has been said finds confir-

mation in what we observe of the progress of the mind in infants and children generally. The course of things, which we observe in them agrees with what our personal consciousness and remembrance, as far back as it goes, enables us to testify with no little confidence in our own case. No one can observe the operations of the mind in infants and children, without being led to believe, that the creator has instituted a connection between the mind and the materal world, and that the greater portion of our early knowledge is from an outward source.

To the infant its nursery is the world. The first ideas of the human race are its particular conceptions of its nurse and mother; and the origin and history of all its notions may be traced to its animal wants, to the light that breaks in from its window, and to the few objects in the immediate neighborhood of the cradle and hearth. When it has become a few years of age, there are other sources of information, other fountains of thought, but they are still external and material. The child then learns the topography of his native village; he explores the margin of its river, ascends its flowering hills, and penetrates the seclusion of its vallies. His mind is full of activity; new and exalting views crowd upon his perceptions; he beholds, and hears, and handles; he wonders, and is delighted. And it is not till after he has grasped the elements of knowledge, which the outward world gives, that he retires within himself, compares, reasons, and seeks for causes and effects.

It is in accordance with what has now been stated of the tendencies of mind in children, that we generally find them instructed by means of sensible objects, or by pictures of such objects. When their teachers make an abstract statement to them of an action or event, they do not understand it; they listen to it with an appearance of confusion and vacancy, for the process is undoubtedly against nature. But show them the objects themselves, or a faithful picture of them, and interpret your abstract expressions by a reference to the object or picture, and they are observed to learn with rapidity and pleasure.

The time has not yet arrived for the springing up and growth of thoughts of an internal and abstract origin.

§. 138. *Fuher proof of the beginnings of knowledge from external causes.*

In the third place, the history of language is a strong proof of the correctness of the position, that the mind is first brought into action by means of the senses, and acquires its earliest knowledge from that source. At first words are few in number, corresponding to the limited extent of ideas. The vocabulary of savage tribes, (those for example which inhabit the American continent,) is in general exceedingly limited. The growth of a language corresponds to the growth of mind; it extends itself by the increased number and power of its words, nearly in exact correspondence with the multiplication and the increased complexity of thought. Now the history of all languages teaches us, that words, which were invented and brought into use one after another in the gradual way just mentioned, were first employed to express external objects, and afterwards were used to express thoughts of internal origin. It is an evidence of the correctness of this remark, that the words of a language are found to vary with the scenery, climate, and natural productions, to which those who speak it have been accustomed. If language were framed in the first instance to express thoughts of internal instead of external origin, the grounds of variation would be different.

Some writer remarks, that among the Boschuanas of South Africa, who live in a parched and arid country, the word PULO, which literally signifies *rain*, is the only term they have to express a blessing or blessings. But there may be blessings internal as well as external, goods and joys of the mind, as well as of the body; still in the language of these Africans, it is all *rain*; the blessings of hope and peace, and friendship, and submission, and all other modes of intellectual and sentient good, are nothing but *rain*.

There are thousands of instances of this kind. Al-

most all the words in every language, expressive of the susceptibilities and operations of the mind, may be clearly shown to have had an external origin and application, before they were applied to the mind. To IMAGINE in its literal signification implies the forming of a picture; to IMPRESS conveys the idea of leaving a stamp or mark, as the seal leaves its exact likeness or stamp on wax; to REFLECT literally means to turn back, to go over the ground again; &c. These words cannot be applied to the mind in the literal sense; the nature of the mind will not admit of such an application; the inference therefore is, that they first had an external application. Now if it be an established truth, that all language has a primary reference to external objects, and that there is no term, expressive of mental acts, which was not originally expressive of something material, the conclusion would seem to be a fair one, that the part of our knowledge, which has its rise by means of the senses, is, as a general statement, first in origin. And the more so, when we combine with these views the considerations, which have been previously advanced.

§. 139. *The same subject further illustrated.*

And, in the fourth place, it is not too much to say, that all the observations, which have been made on persons who from their birth, or at any subsequent period, have been deprived of any of the senses, and all the extraordinary facts, which have come to knowledge, having a bearing on this inquiry go strongly in favour of the views which have been given.——It appears, for instance, from the observations, which have been made in regard to persons, who have been deaf until a particular period, and then have been restored to the power of hearing, that they have never previously had those ideas, which naturally come in by that sense. If a person has been born blind the result is the same; or if having the sense of sight, it has so happened, that he has never seen any colours of a particular description. In the one case, he has no ideas of colours at all, and in the other, only of

those colours which he has seen.—It may be said perhaps, that this is what might be expected, and merely proves the senses to be a source of knowledge, without necessarily involving the priority of that knowledge to what has an internal origin. But then observe the persons referred to a little further, and it will be found, as a general statement, that the powers of their mind have not been unfolded; they lay wrapt up in a great measure in their original darkness; no inward light springs up to compensate for the absence of that, which in other cases bursts in from the outward world. This circumstance evidently tends to confirm the principle we are endeavoring to illustrate.

Of those extraordinary instances, to which we alluded, as having thrown some light on the history of our intellectual acquisitions, is the account, which is given in the Memoirs of the French Academy of Sciences for the year 1703, of a deaf and dumb young man in the city of Chartres. At the age of three and twenty, it so happened, to the great surprise of the whole town, that he was suddenly restored to the sense of hearing, and in a short time he acquired the use of language. Deprived for so long a period of a sense, which in importance ranks with the sight and the touch, unable to hold communion with his fellow beings by means of oral or written language, and not particularly compelled, as he had every care taken of him by his friends and relations, to bring his faculties into exercise, the powers of his mind remained without having opportunity to unfold themselves. Being examined by some men of discernment, it was found that he had no idea of a God, of a soul, of the moral merit or demerit of human actions, and what might seem to be yet more remarkable, he knew not what it was to die; the agonies of dissolution, the grief of friends, and the ceremonies of interment being to him inexplicable mysteries.

Here we see how much knowledge a person was deprived of, merely by his wanting the single sense of hearing; a proof that the senses were designed by our Creator to be the first source of knowledge, and that without

them the faculties of the soul would never become operative.

But this is not the only instance of this sort, which ingenious men have noticed and recorded. In the Transactions of the Royal Society at Edinburgh, (Vol. vii. Pt, 1.,) is a Memoir communicated by Dugald Stewart, which gives an account of James Mitchell, a boy born deaf and blind. The history of this lad, who labored under the uncommon affliction of this double deprivation, illustrates and confirms all, that has been above stated. He made what use he could of the only senses which he possessed, those of touch, taste, and smell, and gained from them a number of ideas. It was a proof of the diligence with which he employed the limited means, which were given him, that he had by the sense of touch thoroughly explored the ground in the neighborhood of the house, where he lived, for hundreds of yards. But deprived of sight, of hearing, and of intercourse by speech, it was very evident to those, who observed him, as might be expected, that his knowledge was in amount exceedingly small. He was destitute of those perceptions, which are appropriate to the particular senses, of which he was deprived; and also of many other notions of an internal origin, which would undoubtedly have arisen, if the powers of the mind had previously been rendered fully operative by means of those assistances, which it usually receives from the bodily organs.——Such instances as these, however they may at first appear, are extremely important. They furnish us with an appeal, not to mere speculations, but to fact. And it is only by checking undue speculation and by continually recurring to facts, that our progress in this science will become sure, rapid, and delightful.*

---

*The statements concerning the young man of Chartres are particularly examined in Condillac's Essay on the origin of Knowledge at Section fourth of Part first. The interesting Memoir of Stewart has recently been republished in the third volume of his Elements of the Philosophy of the Human Mind.

§. 140. *Of connatural or innate knowledge.*

The considerations of this chapter naturally bring us upon the question of innate or connatural knowledge. It was formerly maintained by certain writers, that there are in the minds of men ideas and propositions, which are not acquired or taught at any time, or in any way, but are coetaneous with the existence of the mind itself, being wrought into, and inseparable from it. It was maintained that they are limited to no one class, neither to the rich nor the poor, neither to the learned nor the ignorant, to no clime and to no country, but all participate in them alike. These propositions and ideas, being coetaneous with the existence of the soul, and being there established at the commencement of its existence by the ordinance of the Deity, were regarded as the first principles of knowledge, and as the rules, by which men were to be guided in all their reasonings about natural and moral subjects.

From these innate and original propositions the following may be selected as specimens of the whole;—(1) Of the natural kind. The whole is greater than a part; Whatever is, is; It is impossible for the same thing to be and not to be at the same time and in the same sense.—(2) Of the moral kind, Parents must be honored; Injury must not be done; Contracts should be fulfilled, &c.——(3) Of the religious kind, There is a God; God is to be worshipped; God will approve virtue and punish vice.

§. 141. *The doctrine of innate knowledge not susceptible of proof.*

It will not be deemed necessary to spend much time on this subject, or to enter into any length of investigation. There is an utter absence of all satisfactory evidence, that there is in men any amount of knowledge whatever, answering to this description. The prominent argument, brought forward by the supporters of this doctrine, was this, that all mankind, without exception, and from the earliest period of our being able to form an acquaintance with their minds, exhibit a knowledge of ideas and proposi-

tions of this kind, and that this universal knowledge of them cannot be accounted for, except on the ground of their being coetaneous with the mind's existence, and originally implanted in it. Now if we admit that all men are acquainted with them and assent to them, this by no means proves them innate, so long as we can account for this acquaintance and this assent in some other way. It is granted by all, that the mind exists, that it is capable of action, and that it possesses the power or the ability of acquiring knowledge. If, therefore, in the exercise of this ability, which all admit it to have, we can come to the knowledge of what are called innate or connatural ideas and propositions, it is unnecessary to assign to them another origin, in support of which no positive proof can be brought.

But the truth is, that all men are not acquainted with the ideas and propositions in question, and especially do not exhibit such an acquaintance from the first dawn of their knowledge as would be the case if they were connatural in the mind. The supposed fact, on which this argument is founded, is a mere assumption; it has never been confirmed by candid and careful inquiry, which ought to be done, before it is made use of as proof, nor is it susceptible of such confirmation.

Every enumeration of innate propositions embraces the following, That all men have a notion of a God; and undoubtedly if there be any one, which has a claim to universality and early developement, it is this. But in point of fact we know, that all men are not acquainted with this notion; the testimony of travellers among uncivilized nations has been given again and again, that there is not such an universal acquaintance; but on the contrary whole tribes of men in different parts of the world are found to be destitute of it. There is also a class of unfortunate persons to be found in civilized and christian nations, (we have the reference to the deaf and dumb, those in the situation of the young man of Chartres,) who will throw light on this subject, if men will but take the pains to examine those, who have in no way received reli-

gious instruction. There is reason to believe, that in many cases they will be found utterly without a knowledge of their Creator.

Massieu was the son of a poor shepherd in the neighbourhood of Bourdeaux. Destitute from birth of the sense of hearing, and as a natural consequence, of the power of speech, he grew up, and knew barely enough to enable him to watch his father's flock in the fields. Although his capacity was afterwards fully proved to be of the most comprehensive and splendid character, as it was not then drawn out and brought into action, he appeared in early life to be little above an idiot. In this situation he was taken under the care of the benevolent Sicard, who was able after great labor and ingenuity, to quicken by degrees the slumbering power of thought into developement and activity. Did his instructer suppose, that Massieu was acquainted with the notion of a God?—Far from it; he had abundant evidence to the contrary; nor did he even undertake to teach him that vast idea for some time. He directed his attention at first to knowledge more obvious and accessible in its origin; he led him, in perfect consistency with what is required by the nature and laws of the mind, by easy steps from one degree of knowledge to another, till he supposed him capable of embracing the glorious conception of a First Cause. Then he contrived to arouse his attention and anxiety; he introduced him to a train of thought, which would naturally bring him to the desired result; he had previously taught him the relation of cause and effect; and on this occasion he showed him his watch, and by signs gave him to understand that it implied a designer and maker; and the same of a picture, a piece of statuary, a book, a building, and other objects, indicative of design. Then he held up before him a chain, showing him how one link was connected with and dependent on another; in this way he introduced into the mind of Massieu the complex notion of a mutual dependence and concatenation of causes. At last the full idea, the conception of a primary, self-existent and self-energetic cause, the notion of a God came,

like light from heaven, into his astonished and rejoicing soul. He trembled, says his historian, he was deeply affected, prostrated himself, and gave signs of reverence and adoration. And when he arose, he uttered by signs also, for he had no other language, these beautiful words, which his instructer declared he should never forget, Ah! Let me go to my father, to my mother, to my brothers, to tell them of a God; they know him not.*

Such facts and instances settle this question; they prove, that the doctrine of inborn and connatural knowledge is unfounded; and may we not add, that they are in perfect accordance with a well known passage of the Apostle Paul; *The invisible things of God, from the creation of the world, are clearly seen, being understood by the things that are made, even his eternal power and Godhead.*

§. 142. *The discussion of this subject superseded and unnecessary.*

It is an additional reason for not entering with more fulness and particularity into this inquiry, that the doctrine of innate or connatural knowledge has been frequently discussed at length and refuted; particularly by Gassendi and Locke, and more recently by De Gerando. This being the case, and public sentiment at the same time decidedly rejecting it, it cannot be supposed that every writer on the human mind is called upon to introduce the subject anew, to go over the train of argument, and slay a victim already thrice slain. Let us ask, Are we called upon at the present day to consider and refute every wild notion, which has ever been proposed? On that ground we should not stop here; we must follow Locke further, and undertake a confutation of the doctrine of Malebranche, that we see all things in God; we must follow Reid in his laboured and conclusive overthrow of the long established opinion, that we know nothing of the material world, except by means of filmy images or pictures, actually thrown off from outward objects, and lodged in the

* See the work of Sicard, entitled *Cours D'Instruction d'un Sourd-Muet de Naissance*, Chap. XXV.

sensorium. But such a course will be purposely avoided; it would be alike toilsome and unsatisfactory; it would be as unreasonable as to require from every author in Natural Philosophy a new confutation of the Alchemists, and to exact from every modern astronomer a like renewed discomfiture of long since exploded theories of the heavenly motions. Mr. Locke himself seems willing to admit, that the discussion does not naturally and necessarily make a part of Mental Philosophy; and gives us clearly to understand that it holds so conspicuous a place in his essay, merely from the accidental circumstance of the prevalence in his own time of the errour, which he confuted. Accordingly when he prepared an abstract or abridgement of that work for Le Clerc's *Bibliotheque Universelle*, he omitted the whole of the Book on Innate Ideas.

Furthermore, the whole system of Mr. Locke, (and the same may be said of the views of Reid, Stewart, De Gerando, and Brown, who cannot be considered in the prominent outlines of their doctrines as essentially differing from him,) is an indirect, but conclusive argument against connatural knowledge. If the principles, which they advance, be right, the doctrine of innate knowledge is of course wrong, and requires no direct refutation.

The farmer sees the corn full grown and waving in his field; but he knows it would not have been there, had he not scattered the seed; it has not become what it is, wholly independent of an external agency. And if the mind, like the earth, possesses a natural fertility and capacity of producing, still the results, of which it is capable, can as little be realized, except on certain conditions, as the earth can give out the waving cornfield without the previous planting of the seed. Something is requisite to bring the mind into action, and to keep it in action; it requires the operation of influences from within and without, the atmosphere, the genial rains and the gentle breezes, as well as its own internal laws and powers of growth; and then the tender plant of thought comes forth; it grows high and shoots out its branches; it is clothed with leaves, and beautified with flowers, and in due season bears the ripe fruit.

§. 142. *Further remarks on the rise of knowledge by means of the senses.*

Considering it, therefore, as settled, that there is no connatural knowledge, we recur with increased confidence to the principle, which has been laid down in this chapter, that the mind is first brought into action by the intermediation of the senses, and that the greater part of its earliest knowledge is from an external source. The considerations, that have been adduced in support of this doctrine, are obvious and weighty; they account with much probability for the very beginnings of thought and feeling, and are entirely decisive of the character of our early acquisitions in general. The subject, however, is still open to reflection and if it were needful, might be placed in other lights.

Let us then suppose a man entirely cut off from all outward material impressions, or what is the same thing, with his senses entirely closed. It is very obvious, and the instances already brought forward clearly prove, tha he would be entirely deprived of that vast amount of knowledge, which has an immediate connection with the senses. But this is not all; there are other ideas, whose connection with the senses are less immediate, of which he would not fail to be deprived, by being placed in the circumstances supposed. Even if he should possess the idea of existence, and of himself as a thinking and sentient being, (although we cannot well imagine how this should be, independently of some impression on the senses,) still we have no reason to believe that he would know any thing of space, of motion, of succession, of duration, of the place of objects, of time, &c.

Now it will be noticed, that these are elementary thoughts of great importance; such as are rightly considered essential to the appropriate action of the mind, and to its advancement in knowledge. What could he know of time, without a knowledge of day and night, the rising and setting sun, the changes of the seasons, or some other of its measurements! What could he know

of motion, while utterly unable to form the idea of place! And what could he know of place without the aid of the senses! And under such circumstances, what reasoning would he be capable of, further than to form the single proposition, that his feelings whatever they might be, belonged to himself!

Look at the subject as we will, we must at last come to the conclusion, that the connection of the mind with the material world by means of the senses is the basis, to a great extent at least, of our early mental history, and the only key, that can unlock its explanation. A sketch of that part of the mind's history, without a reference to its relation to matter, would infallibly be found vague, imperfect, and false.—Let it suffice then to add here, that man is what he is in fact, and what he is designed to be in the present life, only by means of this connection. He cannot free himself from it, if he would; and if he should succeed in the attempt, it would only result in self prostration and imbecility. The forms of matter, operating through the senses, press, as it were, on the soul's secret power of harmony, and it sends forth the answer of its thought and feeling. The material creation, where Providence has fixed our dwelling place, and this earthly tenement of our bodies form the first scene of the mind's developement, the first theatre of its exercises, where it puts forth and enacts the incipient part in the great drama of its struggles, growth, and triumphs.

CHAPTER SECOND.

SENSATION AND PERCEPTION.

§. 143. *Sensation a simple mental state originating in the senses.*

In tracing the history of that portion of human thought, which is of external origin, we have frequent occasion to make use of the words Sensation and Perception. The term SENSATION is not of so general a nature as to include every variety of mental state, but is limited to such as answer to a particular description. It does not appear, that the usage of language would forbid our speaking of the feelings of warmth and coldness and hardness, as well as of the *feelings* of love and benevolence and anger, but it would clearly forbid our using the term SENSATION with an application equally extensive. Its application is not only limited, but is fixed with a considerable degree of precision.

Sensation, being a simple act or state of the mind, is unsusceptible of definition; and this is one of its characteristics. As this alone, however, would not separate it from many other mental states, it has this peculiarity to distinguish it, that it is immediately successive to a change in some organ of sense, or at least to a bodily change of some kind. But it is evident, that in respect to numerous other feelings this statement does not hold good. They are immediately subsequent, not to bodily impressions, but to other states of the soul itself. Hence it is, that while

we speak of the sensations of heat and cold, hardness, extension, and the like, we do not commonly apply this term to joy and sorrow, hatred and love, and other emotions and passions.

§. 144. *All sensation is properly and truly in the mind.*

Sensation is often regarded as something having a position, and as taking place in the body, and particularly in the organ of sense. The sensation of touch, as we seem to imagine, is in the hand, which is the organ of touch, and is not truly internal; the hearing is in the ear, and the vision in the eye, and not in the soul. But it will at once occur, that this supposition, however widely and generally it may be made, is altogether at variance with those essential notions, which we have found it necessary to form of matter. If the matter of the hand, of the eye, or ear can have feeling in any degree whatever, there is no difficulty in the supposition, that the matter of the brain, or any other material substance can put forth the exercises and functions of thought. But after what has been already said on the subject of the mind's immateriality, this supposition is altogether inadmissible. All we can say with truth and on good grounds is, that the organs of sense are accessory to sensation and necessary to it, but the sensation or feeling itself is wholly in the mind. How often it is said the eye sees; but the proper language is the soul sees, for the eye is only the organ, instrument, or minister of the soul in visual perceptions.

"A man, (says Dr. Reid,) cannot see the satellites of Jupiter but by a telescope. Does he conclude from this, that it is the telescope, that sees those stars? By no means; such a conclusion would be absurd. It is no less absurd to conclude, that it is the eye that sees, or the ear that hears. The telescope is an artificial organ of sight, but it sees not. The eye is a natural organ of sight, by which we see; but the natural organ sees as little as the artificial."

Among other things, illustrative of the correctness of what has been said, there is this consideration also. The

opinion, that sensation is in the organ or some other material part and not in the soul, is inconsistent with the fundamental and indisputable doctrine of mental identity. "When I say, I see, I hear, I feel, (says the same judidious author,) this implies, that it is one and the same self, that performs all these operations. And as it would be absurd to say that my memory, another man's imagination, and a third man's reason may make one individual intelligent being; it would be equally absurd to say, that one piece of matter seeing, another hearing, and a third feeling, may make one and the same percipient being."*

Although the opinion, that sensation is not in the mind but in the body, is unfounded, it is perhaps not surprising, that such a belief should have arisen. If the hand be palsied, there is no sensation of touch; if the ear be stopped, there is no sensation of hearing; if the eye be closed, there is no vision; hence it happens that when we have these sensations, we are led to think of the organ or part of the bodily system, with the origin of which they are connected. When we feel a pain arising from an external cause, it is a natural, and often a useful curiosity, which endeavours to learn the particular place in the body, which is affected. This, which we are generally able to ascertain, always arrests our attention more or less. In this way we gradually form a very strong association; and almost unconsciously transfer the place of the inward sensation to that outward part, with which we have so frequently connected it in our thoughts. Although this is clearly a mere fallacy, the circumstance of its being a plausible and tenacious one renders it the more necessary to guard against it.

§. 145. *Sensations are not images or resemblances &c. of objects.*

But while we are careful to assign sensations their true place in the mind, and to look upon what is outward in the body as merely the antecedents or causes of them, it

* Reid's Intellectual Powers, Essay II.

is a matter of some consequence to guard against a danger directly the reverse of that, which has been remarked on. We are apt to transfer to the sensation, considered as existing in the mind, some of those qualities, which belong to the external object. But in point of fact our sensations are by no means copies, pictures, or images of outward objects; nor are they representations of them in any material sense whatever; nor do they possess any of their qualities.

It is true, we often think it otherwise; constantly occupied with external objects, when in the act of contemplation we retire within the mind, we unwarily carry with us the form and qualities of matter, and stamp its likeness on the thought itself. But the thought, whatever it may by the constitution of our nature be the sign of, has no form, and presents no image analogous to what are outwardly objects of touch and sight; nor has it form or image in any sense, which we can conceive of. When, therefore, we have an idea of some object as round, we are not to infer from the existence of the quality in the outward object, that the mental state is possessed of the same quality; when we think of any thing as extended, it is not to be supposed, that the thought itself has extension; when we behold and admire the varieties of colour, we are not at liberty to indulge the presumption, that the inward feelings are painted over, and radiant with corresponding hues. There is nothing of the kind, and the admission of such a principle would lead to a multitude of errours.

This subject is illustrated in the following manner by Dr. Reid, whom we have already had repeated occasion to refer to on the subject before us.—"Pressing my hand with force against the table, I feel pain, and I feel the table to be hard. The pain is a sensation of the mind, and there is nothing that resembles it in the table. The hardness is in the table, nor is there any thing, resembling it in the mind. Feeling is applied to both; but in a different sense; being a word common to the act of sensation, and to that of perceiving by the sense of touch.

"I touch the table gently with my hand, and I feel it to be smooth, hard, and cold. These are qualities of the table perceived by touch; but I perceive them by means of a sensation which indicates them. This sensation not being painful, I commonly give no attention to it. It carries my thought immediately to the thing signified by it, and is itself forgotten, as if it had never been; but by repeating it and turning my attention to it, and abstracting my thought from the thing signified by it, I find it to be merely a sensation, and that it has no similitude to the hardness, smoothness, or coldness of the table which are signified by it.

"It is indeed difficult, at first, to disjoin things in our attention which have always been conjoined, and to make that an object of reflection which never was so before; but some pains and practice will overcome this difficulty in those, who have got the habit of reflecting on the operations of their own minds."*

§. 146. *The connection between the mental and physical change not capable of explanation.*

External bodies operate on the senses, before there is any affection of the mind, but it is not easy to say what the precise character and extent of this operation is. We know that some object capable of affecting the organ must be applied to it in some way either directly or indirectly, and it is a matter of knowledge also, that some change in the organ actually takes place; but further than this, we are involved in uncertainty. All we can undertake to do at present is the mere statement of the facts, viz, the application of an external body, and some change in consequence of it in the organ of sense.

Subsequently to the change in the organ, either at its extremity and outward developement or in the brain, with which it is connected, and of which it may be considered as making a part, a change in the mind or a new state of the mind immediately takes place. Here also we

*Reid's Intellectual Powers, Essay II.

are limited to the mere statement of fact. We here touch upon one of those boundaries of the intellect, which men are probably not destined to pass in the present life. We find ourselves unable to resolve and explain the connection between mind and matter in this case, as we do in all others. All we know, and all we can state with confidence is, that a mental affection is immediately subsequent to an affection or change, which is physical. Such is our nature, and such the appointment of Him who ordered it.

§. 147. *Of the meaning and nature of perception.*

We next come to the subject of PERCEPTION, which is intimately connected with that of sensation. This term like many others admits of considerable latitude in its application. In common language we are not only said to have the power of perceiving outward objects, but also of perceiving the agreement or disagreement in the acts of the mind itself. Accordingly we perceive a tree in the forest or a ship at sea, and we also perceive, that the whole is greater than a part, and that the three angles of a triangle are equal to two right angles. But what we have to say here does not concern internal perception, but merely that which relates to objects exteriour to the mind.

Perception, using the term in its application to outward objects, differs from sensation, as a whole does from a part; it embraces more. It may be defined, therefore, an affection or state of the mind, which is immediately successive to certain affections of the organs of sense, and which is referred by us to something external as its cause.

It will be recollected, that the term SENSATION, when applied to the mind, expresses merely the state of the mind, without reference to any thing external, which might be the cause of it, and that it is the name of a truly simple feeling. Perception on the contrary is the name of a complex mental state, including not merely the internal affection of the mind, but also a reference to the

exteriour cause. Sensation is wholly within; but Perception carries us, as it were, out of ourselves, and makes us acquainted with the world around us. It is especially by means of this last power, that material nature, in all its varieties of form and beauty, is brought within the range of our inspection. If we had but sensation alone, there would still be form and fragrance, and colour, and harmony of sound, but it would seem to be wholly inward. The mind would then become not merely what Leibnitz supposed it to be, a mirror of the universe; it would be the universe itself; we could know no other world, no other form of being. Perception prevents the possibility of such a mistake; it undeceives and dissipates the flattering notion, that all things are in the soul; it leads us to other existences, and in particular to the knowledge of the vast and complicated fabric of the material creation.

§. 148. *Of the primary and secondary qualities of matter.*

From what has been said, it will be noticed, that SENSATION implies the existence of an external material world as its cause, and that PERCEPTION implies the same existence both as cause and object. As, therefore, the material world comes now so directly and closely under consideration, it seems proper briefly to revert to that subject. It is hardly necessary to repeat the sentiment, which has already been proposed and insisted on, that we are altogether ignorant of the subjective or real essence of matter. Our knowledge embraces merely its qualities or properties, and nothing more. Without proposing to enter into a minute examination of them, it will be proper to recall to recollection here, that the qualities of material bodies have been ranked by writers under the two heads of Primary and Secondary.

The PRIMARY QUALITIES are known by being essential to the existence of all bodies. They are extension, figure, divisibility, and solidity; and some writers have included motion. They are called PRIMARY for the reason already

distinctly referred to, that all men embrace them in the notions, which they form of matter, and that they are essential to its existence. All bodies have extension, all bodies have figure, all are capable of division, all possess the attribute of solidity.

By SOLIDITY in bodies, (perhaps some would prefer the term RESISTANCE,) is to be understood that quality, by which a body hinders the approach of others, between which it is interposed. In this sense even water, and all other fluids are solid. If particles of water could be prevented from separating, they would oppose so great resistance, that it would be impossible for any two bodies, between which they might be, to come in contact. This was shown in an experiment, which was once made at Florence. A quantity of water was inclosed in a gold ball, which on the most violent pressure could not be made to fill the internal cavity, until the water inside was forced through the pores.

There is reason also for that part of the arrangement, which includes DIVISIBILITY. We cannot conceive of a particle so small as not to be susceptible of division. And to that small particle must belong not only divisibility, but the qualities of solidity, extension, and figure.

§. 149. *Of the secondary qualities of matter.*

The SECONDARY qualities of bodies are of two kinds; (1) Those, which have relation to the perceiving and sentient mind; (2) Those, which have relation to other bodies.

Under the first class are to be included sound, colour, taste, smell, hardness and softness, heat and cold, roughness and smoothness. &c. When we say of a body it has sound, we imply in this remark, that it possesses qualities, which will cause certain effects in the mind; the term sound being applicable by the use of language both to the qualities of the external object, and to the effect produced within. When we say it has colour, we always make a like reference to the mind, which beholds and

contemplates it; and it is the same of the other secondary qualities of this description.

The other class of secondary qualities, (or properties as they are not unfrequently termed,) those which have relation to other material bodies, are exceedingly various and numerous. The material substance, which in relation to the mind possesses the qualities of sound and colour, may possess also in relation to other bodies the qualities or properties of malleability, fusibility, solubility, permeability, and the like.

§. 150. *Of the nature of mental powers or faculties.*

We have spoken of Perception as a POWER of the mind, as well as a mental state or act. This is owing to the imperfection of language. The same term, at least in the English language, signifies both the result, and the corresponding power; and oftentimes there is nothing but the connection to determine which is meant. But we have recurred to this subject here, merely for the purpose of suggesting the importance of keeping in recollection, that mental powers, (what are otherwise called faculties and not unfrequently susceptibilities,) are not distinct from the mind itself. They are only the ability of the mind to act in a particular way. We apply the term also in other cases; we speak of the power or faculty of the MEMORY, of REASONING, of IMAGINATION, &c. Such expressions are found in all languages, and cannot well be avoided. They are brief, and, on the whole, convenient representations of the various ways, in which the soul is capable of acting, or exerting itself.

But while we keep in recollection, that powers or faculties are only the ability of the mind to act in a particular way, it is further to be noticed, that in most cases what are so called are complex in their nature; they are made up in their results of various simple feelings, and imply the exercise of more than one simple susceptibility. It is proper, therefore, to analyze them, and to become acquainted with their parts; otherwise our notions will be confused, and often erroneous. Still we cannot

wholly lay aside the expressions, which use and the wants of men have introduced; nor is this necessary, if we will but take the pains to explain the true nature of the operations, and of that ability of the mind, which they profess to represent. If philosophers should undertake to introduce a whole new system of terms, (and the credit is due to Kant that there is not wanting a notable instance of this in modern times,) still it would be necessary to employ the old ones, in order to make them understood by mankind generally. As a general rule it is better to employ the common and acknowledged phraseology, only taking care to limit and explain it so far as it may be liable to misapprehension in consequence of a new and scientific application. "It looks too much like affectation, (says Locke, speaking of these forms of speech,) wholly to lay them by; and philosophy itself, though it likes not a gaudy dress, yet when it appears in public, must have so much complacency, as to be clothed in the ordinary fashion and language of the country, so far as it can consist with truth and perspicuity."

CHAPTER THIRD.

THE SENSES OF SMELL AND TASTE.

§. 151. *Nature and importance of the senses as a source of knowledge.*

It is desirable to keep clearly in the mind the precise relation of the senses to the origin, progress, and amount of our knowledge, and to possess if possible a correct understanding of their true value. In a certain sense the possession of the bodily organs, with which we are furnished, is not essential and pre-requisite to the possession of that knowledge, which we are accustomed to ascribe to them. There is nothing unwarrantable and unreasonable in the supposition, that the knowledge, which we now have by their means, might have been possessed without their aid, either immediately, or in some way altogether different. Their use and indispensableness in the acquisition of a certain portion of what men are permitted to know, is a matter of arrangement and appointment on the part of our Maker. It is undoubtedly an evidence of the correctness of this remark, that the Supreme Being has a full acquaintance with all those outward objects, which present themselves to our notice, without being indebted to any material instrumentality and mediation. He perceives in another way, or rather all knowledge is

inherent in, and originally and unalterably essential to himself.

It is not so, as we have reason to believe, with any other beings, and certainly not with man. Although a great part of his knowledge relates to material things, he is so formed, and his constitution is so ordered, that he is wholly dependent for it on the senses.—Deprive him of the ear, and all nature becomes voiceless and silent; deprive him of the eye, and the sun and moon withdraw their light, and the universe becomes darkened like sackcloth; deprive him of the sense of touch, and he is then entirely insulated, and as much cut off from all communication with others, as if he were the only being in existence.

§. 152. *Of the connection of the brain with sensation and perception.*

It may perhaps be asked, Whether these views are intended to exclude the brain, as having a connection with the senses in the results, which are here ascribed to them? And this inquiry leads us to observe, (what has been before alluded to,) that the brain is a prominent organ in the material part of the process of sensation and of external perception. The senses evidently cannot be separated from the nervous system. But the substance, which is found in the nerves, excepting the coat in which it is enveloped, is the same as in the brain, being of the same soft and fibrous texture, and in continuity with it. As a general statement, when the brain has been in any way injured, the inward sensation, which would otherwise be distinct on the presence of an external body, is imperfect. Also if the nerve be injured, or if its continuity be disturbed by the pressure of a tight ligature, the effect is the same; a circumstance which goes to confirm the alleged identity of substance in the two.

The brain, therefore, and whatever of the same substance in continuity with it, particularly the nerves, constitute the *sensorial organ*, which, in the subordinate organs of taste, smell, sight, touch, and hearing presents it-

self under different modifications to external objects. On this organ, the *sensorial*, as thus explained, an impression must be made, before there can be sensation and perception.

An impression, for instance, is made on that part of the sensorial organ called the auditory nerve, and a state of mind immediately succeeds, which is variously termed, according to the view in which it is contemplated, either the sensation, or the perception of sound.

An impression is made by the rays of light on that expansion of the optic nerve, which forms what is called the RETINA of the eye, and the intellectual principle is immediately brought into that new position, which is termed visual perception or a perception of sight.

The hand is impressed on a body of an uneven and rough surface, and immediately consequent on this application and pressure, is that state of mind, which is termed a sensation or perception of roughness.

§. 153. *Order in which the senses are to be considered.*

In considering those ideas, which we become possessed of by means of the senses, it is natural to begin with that sense, which will cause us the least difficulty in the analysis of its results; and to proceed to others successively, as we find them increasing in importance. It may not be altogether easy to apply this principle with strictness, but it will answer all the purpose, for which it is here introduced, if we consider the senses in the following order, the smell, taste, hearing, touch, and sight.

The mind holds a communication with the material world by means of the sense of smelling. All animal and vegetable bodies, (and the same will probably hold good of other bodies, though generally in a less degree,) are continually sending out effluvia of great subtility. These small particles are rapidly and widely scattered abroad in the neighbourhood of the body, from which they proceed. No sentient being can come within the circumference, occupied by these continually moving and volatile atoms, without experiencing effects from it.

§. 154. *Of the sense and sensations of smell.*

The medium, through which we have the sensation and perceptions of smell, is the organ which is termed the olfactory nerve, situated principally in the nostrils, but partly in some continuous cavities. When some odoriferous particles, sent from external objects, affect this organ, there is a certain state of mind produced, which varies with the nature of the odoriferous bodies. But we can no more infer from the sensation itself merely, that there exists any necessary connection between the smell and the external objects, than that there exists a connection between the emotions of joy and sorrow and the same objects. It might indeed be suggested to us by the change in our mental states, that there must be some cause or antecedent to the change, but this suggestion would be far from implying the necessity of a *corporeal* cause.

How then does it happen, that we are not merely sensible of the particular sensation, but refer it at once to some external object, to the rose or the honeysuckle? In answer it may be remarked, if we had always been destitute of the senses of sight and touch, this reference never could have been made, but having been furnished with them by the beneficent Author of our being, we make this reference by experience. When we have seen the rose, when we have been near to it and handled it, we have uniformly been conscious of that state of mind, which we term a sensation of smell. When we have come into the neighbourhood of the honeysucklé, or when it has been gathered and presented to us, we have been reminded of its fragrance. And thus, having learnt by experience, that the presence of the odoriferous body is always attended with the sensations of smell, we form the habit of attributing the sensations to that body as their cause.

§. 155. *Of perceptions of smell in distinction from sensations.*

The mental reference, spoken of in the last section, is

made with almost as much promptness, as if it were necessarily involved in the sensation itself. It is at least so rapid that we find ourselves utterly unable to mark the mind's progress from the inward feeling to the conception of the outward cause. Nor is this inability surprizing, when we consider, that we have repeated this process, both in this and in analogous cases, from our earliest childhood. No object has ever been present to us, capable of operating on the senses, where this process has not been gone through. The result of this long-continued and frequent repetition has been an astonishing quickness in the mental action; so much so that the mind leaps outward with the rapidity of lightning, to be present with, and to comprehend the causes of the feeling within.

This view, it will be seen, helps in illustrating the nature of PERCEPTION, as distinguished from sensation. The outlines of that distinction have already been given; and every one of the senses, as well as that now under consideration, will furnish proofs and illustrations of it. Accordingly when we are said to perceive the smell, or to have perceptions of the smell of a body, the rapid process, which has been described, is gone through, and the three things, which were involved in the definition of Perception already given, are supposed to exist; (1) The presence of the odoriferous body and the affection of its appropriate organ; (2) The change or sensation in the mind; and (3) The reference of the sensation to the external body as its cause.

§. 156. *Of the sense and the sensations of taste.*

The tongue, which is covered with numerous nervous papillae, forms essentially the organ of taste; although the papillae are found scattered in other parts of the cavity of the mouth. The application of any sapid body to this organ immediately causes in it a change or affection; and that is at once followed by a mental affection or a new state of the mind. In this way we have the sensations and perceptions, to which we give the names, sweet, bitter, sour, acrid, &c.

Having experienced the inward sensation, the affections of the mind are then referred by us to something external as their *cause*. We do not however always, nor even generally distinguish the qualities, which constitute this cause, by separate and appropriate designations; but express them by the names, that are employed for the internal feeling, viz, sweetness, bitterness, sourness, &c. This reference of what is internally experienced to its external cause, is very rapidly made; so that we at once say of one apple it is sweet, and of another, it is sour. Still it is to be kept in mind, that in point of fact, it is subsequent, both in the order of nature and of time, to the mere sensation; although we may not be able, in consequence of its rapidity, to mark distinctly the progress of the mental action from the one to the other. As in the case of smells, which have already been remarked upon, the reference is the result of our former experience. We say of one body it is sweet, and of another, it is sour, because we have ever observed, that the mental states, indicated by those terms, have always existed in connection with the presence of those bodies.

Whenever, therefore, we say of any bodies, that they are sweet, bitter, sour, or apply any other epithets, expressive of sapid qualities, we mean to be understood to say, that such bodies are fitted in the constitution of things to cause in the mind the sensations of sweetness, bitterness, and sourness, or other sensations, expressed by denominations of taste. Or, in other words, that they are the established antecedents of such mental states, as there is, further than this, no necessary connection between them.

§. 157. *Design and uses of the senses of smell and taste.*

It is not unprofitable to delay oftentimes, and contemplate the designs and uses, which nature has in view in her works. Although the sense of smell may appear, (and perhaps with sufficient reason,) to be of less importance, than the other senses, and other parts of the animal economy, it is not without its ends. There is evidently design in

the position of the organ in reference to the effluvia, which are the direct subjects of its action, it being placed in the inside of a canal, where the air is continually forced in and out with every breath we draw. The organ is precisely adapted, both in its nature and its place, to its appointed medium of communication with other bodies; nor is this the only mark of design attending it. This sense is frequently a source of gratification; and although it is less keen and powerful in men than in many inferiour animals, it still has power enough to afford much assistance in this respect, that it often warns us of the presence of objects, which experience has found to be injurious to us. The remark has been justly made, that the senses both of taste and smell are of great use in distinguishing bodies, that cannot be distinguished by our other senses. They are peculiarly quick and exact in their judgments, especially in discerning, before we can ascertain it in any other way, the beginning and progress of those changes, which all bodies are constantly undergoing.

But in both of these senses design and utility are discoverable in reference to food in particular. While the sense of smell guards the entrance of the canal for breathing, the sense of taste has its station at the entrance of the alimentary canal. Hence the food, which we consume, undergoes the scrutiny of both; an intentional and benevolent provision for protecting men and the animal creation generally against the introduction of what would be noxious to them.

CHAPTER FOURTH.

THE SENSE OF HEARING.

§. 158. *Organ of the sense of hearing.*

FOLLOWING the order, which has been proposed, we are next to consider the sense of HEARING. And in proceeding to the consideration of this subject, the remark is a very obvious one, that we should be unable to hear, if we had not a sense designed for and appropriate to that result. The air, when put strongly in motion, is distinctly perceived by the touch; but no impression, which it could make on that sense, would cause that internal feeling, which is termed a sensation of sound. Our Creator therefore has taken care, that these sensations shall have their own organ; and it is obviously one of precise and elaborate workmanship. The ear is designedly planted in a position, where with the greatest ease it takes cognizance of whatever is going on in the contiguous atmosphere. When we examine it externally, we not only find it thus favorably situated, but presenting a hollowed and capacious surface, so formed as to grasp and gather in the undulations of air, continually floating and in motion around it. Without, however, delaying to give a minute description of the internal construction of the ear, which belongs rather to the physiologist, it will answer our present purpose merely to add, that these undulations are conducted by it through various windings, till they are

brought in a state of concentration, as it were, against the membrane, called the TYMPANUM. It is worthy of notice, that on the internal surface of this membrane, (the drum as it is popularly called,) there is a nerve spread out in a manner analogous to the expansion of the optic nerve at the bottom of the eye. Whether this nervous expansion be indispensably necessary to the result or not, it is certain that a pressure upon or affection of the tympanum by the external air is followed by a new state of the mind, known as the sensation or perception of sound.

§. 159. *Nature of sonorous bodies and the medium of the communication of sound.*

When we leave the bodily organ, and looking outward inquire still further for the origin of the sensations, which we have by means of the ear, we find them attributable ultimately to the presence and influence of the substances around us. Those undulations of air, which impinge upon the tympanum, and without which there is no sensation of sound, are caused by the vibrations or oscillations of the particles of certain bodies. The material substances which have this quality are termed sonorous, as wood, brass, iron, &c; but it exists in different bodies in very various degrees.

The quality of sonorousness, therefore, in any substance is properly a susceptibility of motion among its own parts. When it is forcibly struck, this motion exists first in itself, and is afterwards communicated to the circumambient air. The movement of the air, which is thus caused, is again communicated, like the concentric waves of water agitated by a stone thrown into it, to other portions successively, till it reaches the ear.

The air accordingly is the medium of communication between the sonorous body, and the tympanum of the ear. It is true, that many solid bodies are good conductors of sound as well as the atmosphere, but as portions of air, through which the vibratory motion must of course pass, are in all cases interposed between that organ and the sounding body, it is not necessary to dwell upon them

here. It is sufficient for our present purpose merely to understand, that there is in every sounding body in the first place a vibratory motion among its own particles from some cause or other; that this vibration or undulation is communicated from the sounding body to the air and from one portion of air to another, till it reaches the organ of hearing. Why the internal sensation should at once follow the completion of this process is another inquiry, which we do not undertake to explain. We have before us the antecedent and the consequent, the affection of the organ of hearing by an outward impulse, and the new mental state within; but the reason of this invariable connection in two things, that are entirely distinct and different, is a matter beyond our limited comprehension.

§. 160. *Varieties of the sensation of sound.*

The sensations, which we thus become possessed of by the hearing, are far more numerous than the words and the forms of speech, having relation to them in different languages, would lead us to suppose. It will help to illustrate this subject, if we recur a moment to the sense of TASTE. The remark has somewhere been made to this effect, and probably with much truth, that if a person were to examine five hundred different wines, he would hardly find two of them of precisely the same flavour. The diversity is almost endless, although there is no language, which distinguishes each variety of taste by a separate name. It is the same in respect to the sensations of sound. These sensations exhibit the greatest variety, although their differences are too minute to be separately and distinctly represented by language.

These views will appear the less objectionable, when it is remembered, that sounds differ from each other both in the tone, and in the strength of the tone. It is remarked by Dr. Reid, that five hundred variations of tone may be perceived by the ear, also an equal number of variations in the strength of the tone; making, as he expressly informs us, by a combination of the tones and of the

degrees of strength, more than twenty thousand simple sounds differing either in tone or strength.

In a perfect tone, a great many undulations of elastic air are required, which must be of equal duration and extent, and follow each other with perfect regularity. Each undulation is made up of the advance and retreat of innumerable particles, whose motions are all uniform in direction, force, and time. Accordingly there will be varieties also and shades of difference in the same tone, arising from the position and manner of striking the sonorous body, from the constitution of the elastic medium, and from the state of the organ of hearing.

Different instruments, such as a flute, a violin, and a bass-viol may all sound the same tone, and yet be easily distinguishable. A considerable number of human voices may sound the same note, and with equal strength, and yet there will be some difference. The same voice, while it maintains the proper distinctions of sound, may yet be varied many ways by sickness or health, youth or age, or any other alterations in our bodily condition, to which we are incident.

§. 161. *Manner in which we learn the place of sounds.*

It is a fact particularly worthy of notice in respect to sounds, that we should not know, previous to all experience on the subject, whether the sound came from the right or left, from above or below, from a smaller or greater distance. And this will appear the less surprizing, when we remember, that the undulations of air are always changed from their original direction by the channels and the windings of the ear, before they strike the tympanum. Abundant facts confirm this statement.

Dr. Reid mentions, that once, as he was lying in bed, having been put into a fright, he heard his own heart beat. He took it to be some one knocking at the door, and arose, and opened the door oftener than once before he discovered, that the sound was in his own breast. Some traveller has related, that when he first heard the roaring of a lion in a desert wilderness, not seeing the animal, he did not

know on what side to apprehend danger, as the sound seemed to him to proceed from the ground, and to enclose a circle, of which he and his companions stood in the centre.

It is by custom or experience, that we learn to distinguish the state of things, and, in some measure also, their nature, by means of their sound. It is thus that we learn, that one noise is in a contiguous room, that another is above our heads, and another is in the street. And what seems to be an evidence of this is, that when we are in a strange place, after all our experience, we very frequently find ourselves mistaken in these respects.

If a man born deaf were suddenly made to hear, he would probably consider his first sensations of sound as originating wholly within himself. But in process of time we learn not only to refer the origin of sounds to a position above or below, to the right or left; but to connect each particular sound with a particular external cause, referring one to a bell as its appropriate external cause, another to a flute, another to a trumpet.

§. 162. *Application of these views to the art of ventriloquism.*

We are naturally led to make a few remarks here in explanation of VENTRILOQUISM, a well known art, by which persons can so modify their voice, as to make it appear to their audience to proceed from different objects, distances, and directions. The great requisite on the part of the ventriloquist is to be able to mimic sounds; and he will be likely to succeed nearly in proportion to his skill in this particular. The secret then of his acoustic deceptions, supposing him to be capable of exact imitation, will be sufficiently understood by referring to the statement maintained in the preceding section, viz. That previous to experience, we are unable to refer sounds to any particular external cause.

The sound itself never gives us any direct and immediate indication of the place, distance, or direction of the sonorous body. It is only by experience, it is only

by the association of place with sound, that the latter becomes an indication of the former. Now supposing the ventriloquist to possess a delicate ear, which is implied in his ability to mimic sounds, he soon learns by careful observation the difference, which change of place causes in the same sound. Having in this way ascertained the particular modulation of sound, which, in accordance with the experience of men and the associations they have formed, are appropriate to any particular distances, direction, or object, it is evident, whenever he exactly or very nearly imitates such modulations, that the sounds must appear to his audience to come from such distance, object, or direction.

One part of the art, however, consists in controlling the attention of persons present, and in directing that attention to some particular place by a remark, motion, or some other method. If, for instance, the sound is to come from under a tumbler or hat, the performer finds it important to have their attention directed to that particular object, which affords an opportunity for the exercise of all those associations, which they have formed with any sound coming from a very confined place. All, then, that remains for him to do, is, to give his voice a dull modulation and on a low key, which we know from our experience to be the character of confined sounds. Then there seems to be a voice speaking under a tumbler or hat; and if any person should either intentionally or unintentionally, lift these articles up, the ventriloquist immediately utters himself more freely like a person who had been very much confined, on being re-admitted into the free and open air. It is also necessary, when his face is towards his auditors, that he should make use chiefly of the muscles of the throat; an outward and visible moving of the lips would much weaken the deception.

§. 163. *Uses of hearing and its connection with oral language.*

Although, as in the cases just mentioned, the artifices of men may sometimes impose upon this organ and lead its decisions astray, it is one, in the ordinary calls for its

exercise, of exceeding value. One of the distinguished benefits of the sense of hearing is, that, in consequence of it, we are enabled to hold intercourse with each other by means of spoken language, without which the advancement of the human mind must have inevitably been very limited. It is by means of speech, that we express our feelings to the little company of our neighbours and our own family ; and without it this pleasant and cheering intercourse must be almost entirely suspended. Not limited in its beneficial results to families and neighbourhoods, it has been made the medium of the transmission of thought from age to age, from generation to generation. So that in one age has been concentrated the result of all the researches, the combination of the wisdom of all the preceding.

"There is without all doubt," it has been observed, "a chain of the thoughts of human kind, from the origin of the world down to the moment at which we exist, a chain not less universal than that of the generation of every being, that lives. Ages have exerted their influence on ages ; nations on nations ; truths on errours ; errours on truths."

Whether oral language was an original invention of man, or whether in the first instance it was a power bestowed upon him by his Creator and coeval with the human race, the ear must in either case have been the primary recipient.—The faculty of speech so necessary and so beneficial could not have existed, either by invention or by communication, without the sense of hearing. And hence it happens, that all those, who are born deaf, are without speech. Their inability to speak is not in general the result of a defect in the organs of speech, but because they cannot hear others, and thus imitate the sounds they utter.

CHAPTER FIFTH.

THE SENSE OF TOUCH.

§. 164. *Of the sense of touch and the sensations in general.*

We are next to consider the sense of TOUCH. The principal organ of this sense is the hand, although it is not limited to that part of our frame, but is diffused over the whole body. The hand principally arrests our attention as the organ of this sense, because being furnished with various articulations, it is easily moveable by the muscles, and can readily adopt itself to the various changes of form in the objects, to which it is applied.

The senses, which have hitherto been examined, are more simple and uniform in their results than that of the touch. By the ear we merely possess that sensation, which we denominate hearing; we have the knowledge of sounds, and that is all. By the palate we acquire a knowledge of tastes, and by the sense of smelling we become acquainted with the odours of bodies. The knowledge, which is directly acquired by all these senses, is limited to the qualities, which have been mentioned. By the sense of touch, on the contrary, we become acquainted not with one merely, but with a variety of qualities, such as the following, heat and cold, hardness and softness, roughness and smoothness, figure, solidity or resistance, extension, and perhaps motion; and in particular it gives occasion for the origin of the antecedent and more general notion of externality.

§. 165. *The idea of externality or outness suggested by the sense of touch.*

If man were possessed of the sense of smell alone, it would be found, that the earliest elements of his knowledge consisted exclusively in sensations of odours. According however as these sensations were agreeable or disagreeable, he would acquire the additional ideas of pleasure and pain. And having experienced pleasure and pain, we may suppose, that this would subsequently give rise to the notions of desire and aversion. But if he had no other sense, all these feelings would seem to him to be internal, to be mere emanations from the soul itself; and he would be incapable of referring them to an external cause.

If he were possessed of the sense of hearing alone, the result would be similar; his existence would then seem to consist of harmony, as in the other case it would be made up of fragrance; nor indeed by the aid of merely both these senses combined, would he be able to form an idea of externality or outness.

But this idea is a most important one; it is the connecting thought, which introduces us to an acquaintance with a new form of existence, different from that interiour existence, which we variously call by the names, spirit, mind, or soul. This first idea arises in the mind by means of the sense of touch.

All the senses, not excluding the smell and the taste, which are the least important in a mere intellectual point of view, have their share in bringing the mind into action; they are the primitive sources of thought and of emotion. The mind becomes, in consequence of the aids of the other senses, (supposing ourselves to be as yet without the sense of touch, or at least as not having applied it to any body by means of a muscular effort,) full of activity and fruitfulness, although its acts are at first wholly internal. It compares, abstracts, reasons, chooses, wills; and meeting with no obstacle, it finds every thing easy, and a source of pleasure. But after a time it chooses.

to move the limbs in this direction or that; it chooses to press the hand through this bright or that fragrant body; and its volition is checked, its desire is counteracted, the wonted series of thoughts is disturbed and broken; but without even the interval of a momentary pause of wonder, there arises vividly in the soul a new thought, a new feeling, which we call the idea of externality or outness. It is the sense of touch which impinges, under the ordering of the muscular effort, upon the obstacle that is thrown across the direction of our volition; and none other of the senses admits of this peculiar application. It is thus the means of breaking up the previous connection and tendency of thought, and gives occasion for the rise of a new idea. And this idea, arising without doubt under these circumstances, becomes associated with all those notions, which we subsequently form of matter.

§. 166. *The idea of externality or outness further considered.*

As this notion is one of much importance, and gives a new character to the great mass of our knowledge by discovering and establishing a multitude of new relations, it is right to delay upon it a moment longer. The circumstances, which have been stated, are properly its occasion. Whenever those circumstances exist, the mind from its own activity at once brings up or suggests it; the moment we come against a resisting object, whether sooner or later, there is a new state of mind, the new feeling in question. This feeling is a definite one, and like all our simple notions has a nature and character of its own; although in consequence of its being simple, we cannot make its precise nature known by means of words merely. But that there is such an idea, and that it has such a distinctive character is evinced, not only by every man's consciousness, but by his actions, and by all languages and dialects. It is a matter of course, that it is evinced by consciousness, unless some person can be found firmly believing, that all possible existences are shut up and incorpora-

ted within his own existence. This is evident, because the mere supposition of any thing outward, whatever its character or in whatever degree, necessarily involves the idea of externality.

It is not less clearly evinced by men's actions, unless some person can be found, whose actions are predicated and directed on the basis of the non-existence of the material world. And on this point reference might be made also to all languages. There is probably not a human dialect, that is destitute of what we call in the English tongue OUTNESS by a word of Saxon, and at other times EXTERNALITY by a word of Latin origin. But it is unreasonable to suppose, that the framers of language would have so generally agreed in forming a term for a mental state which does not generally exist.

§. 167. *Origin of the notions of extension and of the form or figure of bodies.*

The idea of EXTENSION has its origin by means of the sense of touch. When the touch is applied to bodies, where in the intermediate parts there is a continuity of the same substance, we necessarily form that notion. It is not however to be imagined, that Extension, as it exists outwardly and the corresponding notion in the mind actually resemble each other. So far from any imitation and copying from one to the other, or resemblance in any way, there is a radical and utter diversity. As to outward, material extension, it is not necessary to attend to it here; our business at present is with the corresponding inward feeling. Nor will it be necessary to delay even upon that; the more we multiply words upon it, the more obscure it becomes. As it is a simple idea we cannot resolve it into others, and in that way make it clearer by defining it. We must refer in this case, as in others like it, to each one's personal experience. It will be better understood in that way, than by any form of words.

The notion of extension is intimately connected with, and may be considered in some sort the foundation of that of the FORM or figure of bodies.——Dr. Brown some-

where calls the Form of bodies their relation to each other in space. This is thought to afford matter for reflection; but when we consider that SPACE, whatever it may be objectively or outwardly, exists in the mind as a simple notion, and that the particular relation here spoken of is not pointed out, the remark may not be found to throw much light on the subject. Still we do not suppose, that any one is ignorant of what FORM is; men must be supposed to know that, if they are thought to know any thing. All that is meant to be asserted here is, that the idea of extension is antecedent, in the order of nature, to that of form; and that the latter could not exist without the other; but that both nevertheless are simple, and both are to be ascribed to the sense of touch.

§. 168. *On the sensations of heat and cold.*

Among the feelings, which are usually classed with the intimations of the sense under consideration, are those, which are connected with changes in the temperature of our bodies. Some writers, it is true, have been inclined to dissent from this arrangement, and have hazarded an opinion, that they ought not to be ascribed to the sense of TOUCH; but Dr. Reid on the contrary, who gave to our sensations the most careful and patient attention, has decidedly assigned to them this origin. Among other remarks he has expressed himself on this subject to this effect.

"The words HEAT and COLD, (he remarks, Inquiry into the Human Mind, Chap. V.) have each of them two significations; they sometimes signify certain sensations of the mind, which can have no existence when they are not felt, nor can exist any where but in the mind or sentient being; but more frequently they signify a quality in bodies, which, by the laws of nature, occasions the sensations of heat and cold in us: a quality which, though connected by custom so closely with the sensation, that we cannot without difficulty separate them; yet hath not the least resemblance to it, and may continue to exist when there is no sensation at all.

"The sensations of heat and cold are perfectly known,

for they neither are, nor can be, any thing else than what we feel them to be; but the qualities in bodies, which we call *heat* and *cold*, are unknown. They are only conceived by us, as unknown causes or occasions of the sensations, to which we give the same names. But though common sense says nothing of the nature of these qualities, it plainly dictates the existence of them; and to deny that there can be heat or cold when they are not felt, is an absurdity too gross to merit confutation. For what could be more absurd, than, to say, that the thermometer cannot rise or fall, unless some person be present, or that the coast of Guinea would be as cold as Nova Zembla, if it had no inhabitants.

"It is the business of philosophers to investigate by proper experiments and induction, what heat and cold are in bodies. And whether they make heat a particular element diffused through nature, and accumulated in the heated body, or whether they make it a certain vibration of the parts of the heated body; whether they determine that heat and cold are contrary qualities, as the sensations undoubtedly are contrary, or that heat only is a quality, and cold its privation: these questions are within the province of philosophy; for common sense says nothing on the one side or the other.

"But whatever be the nature of that quality in bodies which we call *heat*, we certainly know this, that it cannot in the least resemble the sensation of heat. It is no less absurd to suppose a likeness between the sensation and the quality, than it would be to suppose, that the pain of the gout resembles a square or a triangle. The simplest man that hath common sense, does not imagine the sensation of heat, or any thing that resembles that sensation, to be in the fire. He only imagines, that there is something in the fire, which makes him and other sentient beings feel heat. Yet as the name of *heat*, in common language, more frequently and more properly signifies this unknown something in the fire, than the sensation occasioned by it, he justly laughs at the philosopher, who denies that there is

any heat in the fire, and thinks that he speaks contrary to common sense."

§. 169. *On the sensations of hardness and softness.*

"Let us next consider, (continues the same writer.) HARDNESS AND SOFTNESS; by which words we always understand real properties or qualities of bodies of which we have a distinct conception.

"When the parts of a body adhere so firmly that it cannot easily be made to change its figure, we call it *hard*; when its parts are easily displaced, we call it *soft*. This is the notion which all mankind have of hardness and softness: they are neither sensations, nor like any sensation; they were real qualities before they were perceived by touch, and continue to be so when they are not perceived; for if any man will affirm, that diamonds were not hard till they were handled, who would reason with him?

"There is, no doubt, a sensation by which we perceive a body to be hard or soft. This sensation of hardness may easily be had, by pressing one's hand against a table, and attending to the feeling that ensues, setting aside, as much as possible, all thought of the table and its qualities, or of any external thing. But it is one thing to have the sensation, and another to attend to it and make it a distinct object of reflection. The first is very easy; the last in most cases extremely difficult.

"We are so accustomed to use the sensation as a sign, and to pass immediately to the hardness signified, that, as far as appears, it was never made an object of thought, either by the vulgar, or by philosophers; nor has it a name in any language. There is no sensation more distinct, or more frequent; yet it is never attended to, but passes through the mind instantaneously, and serves only to introduce that quality in bodies, which, by a law of our constitution, it suggests.

There are indeed some cases, wherein it is no difficult matter to attend to the sensation occasioned by the hardness of a body; for instance, when it is so violent as to

occasion considerable pain: then nature calls upon us to attend to it; and then we acknowledge that it is a mere sensation, and can only be in a sentient being. If a man runs his head with violence against a pillar, I appeal to him whether the pain he feels resembles the hardness of the stone; or if he can conceive any thing like what he feels to be in an inanimate piece of matter.

"The attention of the mind is here entirely turned toward the painful feeling; and, to speak in the common language of mankind, he feels nothing in the stone, but feels a violent pain in his head. It is quite otherwise when he leans his head gently against the pillar; for then he will tell you that he feels nothing in his head, but feels hardness in the stone. Hath he not a sensation in this case as well as in the other? Undoubtedly he hath; but it is a sensation which nature intended only as a sign of something in the stone; and, accordingly, he instantly fixes his attention upon the thing signified; and cannot, without great difficulty, attend so much to the sensation as to be persuaded that there is any such thing distinct from the hardness it signifies.

"But however difficult it may be to attend to this fugitive sensation, to stop its rapid progress, and to disjoin it from the external quality and hardness, in whose shadow it is apt immediately to hide itself: this is what a philosopher by pains and practice must attain, otherwise it will be impossible for him to reason justly upon this subject, or even to understand what is here advanced. For the last appeal, in subjects of this nature, must be to what a man feels or perceives in his own mind."

§. 170. *Of certain indefinite feelings sometimes ascribed to the touch.*

In connection with these views on the sensations of touch, it is proper to remark, that certain feelings have been ascribed to that sense, which are probably of a character too indefinite, to admit of a positive and undoubted classification. Although they clearly have their

place, in the general arrangement which has been laid down, with the states of mind which we are now considering; that is to say, are rather of an external and material, than of an internal origin; still they do not so evidently admit of an assignment to a particular sense. Those sensations to which we now refer, (if it be proper to use the term in application to them,) appear to have their origin in the human system considered as a whole, made up of bones, flesh, muscles, the senses, &c. rather than to be susceptible of being traced to any particular part. Of this description are the feelings expressed by the terms, uneasiness, weariness, weakness, sickness, and those of an opposite character, as ease, hilarity, health, vigour, &c.

Similar views will be found to apply, in part at least, to the sensations, which we express by the terms HUNGER and THIRST. These appear to be complex in their nature, including a feeling of uneasiness, combined with a desire to relieve that uneasiness. When we say that these views will apply in part to hunger and thirst, the design is to limit the application of them to the element of *uneasiness*. This elementary feeling undoubtedly has its origin in the bodily system, and therefore comes in this case under the general class of notions of an EXTERNAL origin; but still it is not easy to say, that it should be arranged with our tactual feelings, which has sometimes been done. Every one must be conscious, it is thought, that the feeling of hunger does not greatly resemble the sensations of hardness and softness, roughness or smoothness or other sensations, which are usually ascribed to the touch.——The cause of that peculiar state of the nerves of the stomach, which is antecedent to the uneasy feeling, involved in what is termed hunger, has been a subject of difference of opinion, and does not appear to be well understood. If we were fully acquainted with this, we might perhaps be less at a loss where to arrange the feeling in question.

§. 171. *Relation between the sensation and what is outwardly signified.*

We here return a moment to the subject of the relation between the internal sensation and the outward object; and again repeat, that the mental state and the corresponding outward object are altogether diverse. This view holds good in the case of the secondary, as well as of the primary qualities of matter. Whether we speak of extension or resistance, or heat, or colour, or roughness, there are in all cases alike, two things, the internal affection and the outward quality; but they are utterly distinct, totally without likeness to each other. But how it happens that one thing, which is totally different from another, can nevertheless give us a knowledge of that, from which it differs, it would be a waste of time to attempt to explain. Our knowledge is undoubtedly limited to the mere fact.

This is one of those difficult, but decisive points in MENTAL PHILOSOPHY, of which it is essential to possess a precise and correct understanding. The letters, which cover over the page of a book, are a very different thing from the thought, and the combinations of thought, which they stand for. The accountant's columns of numerals are not identical with the quantities and their relations, which they represent. And so in regard to the mind; all its acts are of one kind, and what they stand for is of another. The mind, in all its feelings and operations, is governed by its own laws, and characterizes its efforts by the essential elements of its own nature. Nothing, which is seen or heard, nothing which is the subject of taste or touch or any other sense, nothing material, which can be imagined to exist in any place or in any form, can furnish the least positive disclosure either of its intrinisic nature or of the mode of its action.

What then is the relation between the sensation and the outward object, between the perception and the thing perceived? Evidently that of the sign and the thing signified. And as in a multitude of cases, the sign may

give a knowledge of its object without any other grounds of such knowledge than mere institution or appointment, so it is in this. The mind, maintaining its appropriate action, and utterly rejecting the intervention of all images and visible representations, except what are outward and material and totally distinct from itself both in place and nature, is notwithstanding susceptible of the knowledge of things exteriour, and can form an acquaintance with the universe of matter.

A misapprehension in this respect, the mistaken supposition of the mind's either receiving actual filmy images from external objects, or being itself transformed into the likeness of such images, has been in times past the source of much confusion and contention. But that opinion, however prevalent it may have been once, is mere hypothesis; it has not the slightest well-founded evidence in its favour. Still we can reject it wholly from our belief, and from all influence on our belief, only by guarding against early associations, by a rigid self-inspection, and by carefully separating the material and the immaterial, the qualities of mind and of matter.

CHAPTER SIXTH.

THE SENSE OF SIGHT.

§. 172. *Of the organ of sight and the uses or benefits of that sense.*

Of those instruments of external perception, with which a benevolent Providence has favoured us, a high rank must be given to the sense of seeing. If we were restricted in the process of acquiring knowledge to the informations of the touch merely, how many embarrassments would attend our progress, and how slow it would prove! Having ever possessed sight, it would be many years before the most acute and active person could form an idea of a mountain or even of a large edifice. But by the additional help of the sense of seeing, he not only observes the figure of large buildings, but is in a moment possessed of all the beauties of a wide and variegated landscape.

The organ of this sense is the eye. On a slight examination the eye is found to be a sort of telescope, having its distinct parts, and discovering throughout the most exquisite construction. The medium, on which this organ acts, are rays of light, every-where diffused, and always advancing, if they meet with no opposition, in direct lines. The eye like all the other senses not only receives externally the medium, on which it acts; but carries the rays of light into itself; and on principles purely scientific refracts and combines them anew.

It does not however fall within our plan to give a mi-

nute description of the eye, which belongs rather to the anatomist; but such a description, with the statement of the uses of the different parts of the organ must be to a candid and reflecting mind a most powerful argument in proof of the existence and goodness of the Supreme Being. How wonderful among other things is the adaptation of the rays of light to the eye? If these rays were not of a texture extremely small, they would cause much pain to the organ of vision, into which they so rapidly pass. If they were not capable of exciting within us the sensations of colour, we should be deprived of much of that high satisfaction, which we now take in beholding surrounding objects; showing forth, wherever they are to be found, the greatest variety and the utmost richness of tints.

§. 173. *Statement of the mode or process in visual perception.*

In the process of vision, the rays of light, coming from various objects and in various directions, strike in the first place on the pellucid or transparent part of the ball of the eye.

If they were to continue passing on precisely in the same direction, they would produce merely one mingled and indistinct expanse of colour. In their progress however through the chrystaline humour, they are refracted or bent from their former direction, and are distributed to certain focal points on the retina, which is a white, fibrous expansion of the optic nerve.

The rays of light, coming from objects in the field of vision, whether it be more or less extensive, as soon as they have been distributed on their distinct portions of the retina, and have formed an image there, are immediately followed by the sensation or perception, which is termed sight. The image, which is thus pictured on the retina, is the last step, which we are able to designate in the material part of the process in visual perception; the mental state follows, but it is not in our power to trace, even in the smallest degree, any physical connection between the optical image and the corresponding state of

the mind.——All that we can say in this case is, that we suppose them to hold to each other the relation of antecedent and consequent by an ultimate law of our constitution.

§. 174. *Of the original and acquired perceptions of sight.*

In speaking of those sensations and perceptions, the origin of which is generally attributed to the sense of sight, it is necessary to make a distinction between those, which are ORIGINAL, and those which are ACQUIRED. Nothing is properly original with the sense of sight but the sensations of colours, as red, blue, white, yellow, &c. These sensations, (or perceptions, as they are otherwise called, when the internal feeling is combined with a reference to the external cause,) are exceedingly numerous. In this respect the intimations of the sense of sight stand on the same footing with those of the taste and hearing; although distinctive names, in consequence of the difficulty of accurately separating and drawing the line between each, are given only in a few cases. All the sensations of colour are original with the sight; and are not to be ascribed to any other sense.

A part however of that knowledge, which we attribute to the sight, and which has the appearance of being immediate and original in that sense, is not so. Some of its alleged perceptions are properly the results of sensations, combined not only with the usual reference to an external cause, but with various other acts of the judgment. In some cases the combination of the acts of the judgment with the visual sensation is carried so far, that there is a sort of transfer to the sight of the knowledge, which has been obtained from some other source. And not unfrequently, in consequence of a long and tenacious association, we are apt to look upon the knowledge thus acquired, as truly original with the seeing power. This will suffice perhaps, as a statement of the general fact, while the brief examination of a few instances will help to the more thorough understanding of those acquired perceptions of the sight, which are here referred to.

§. 175. *The idea of extension not originally from sight.*

It is well known that there is nothing more common than for a person to say, that he sees the length or breadth of any external object; that he sees its extent, &c. These expressions appear to imply, (and undoubtedly are so understood,) that extension is a direct object of sight. There is no question, that such is the common sentiment, and that the outlines and surface of bodies, which they permanently expand, are supposed to be truly seen. An opinion different from this might even incur the charge of great absurdity.

But properly the notion of extension, as we have already seen, has its origin in the sense of touch. Being a simple and elementary thought, it is not susceptible of definition; nor, when we consider it as existing outwardly and materially, can we make it a matter of description without running into the confusion of using synonymous words. But whatever it is, (and certainly there can be neither ignorance nor disagreement on that point, however much language may fail of conveying our knowledge of it,) it is not to be ascribed to the sight.

The notion of extension is closely connected with externality. It is not possible to form the idea of extension from mere consciousness, or a reflection on what takes place within us. But making a muscular effort, and thus applying the touch to some resisting body, we first have the notion of outness; and either from the same application of that sense, or when we have repeated it continuously on the same surface, we have the additional notion of its being extended or spread out. If a man were fixed immovably in one place, capable of smelling, tasting, hearing, and seeing, but without tactual impressions originating from a resisting body, he would never possess a knowledge of either. Having first gained that knowledge from the touch in the way just mentioned, he learns in time what appearance extended bodies, which are of course coloured, make to the eye. At a very early period, having ascertained that all coloured bodies are spread

out or extended, he invariably associates the idea of extension with that coloured appearance. Hence he virtually and practically transfers the knowledge obtained by one sense to another; and even after a time imagines extension to be a direct object of sight, when in fact what is seen is only a sign of it and merely suggests it. An affection of the sense of touch is the true and original occasion of the origin of this notion; and it becomes an idea of sight only by acquisition or transference.

§. 176. *Of the knowledge of the figure of bodies by the sight.*

Views similar to those, which have been already advanced, will evidently apply to the figure of bodies. We acquire a knowledge of the figure or form of bodies originally by the sense of touch. But it cannot be doubted, that this knowledge is often confidently attributed to the sense of sight as well as the touch. Although there is reason to believe, that men labour under a mistake in this, it is not strange, when we trace back our mental history to its earlier periods, that such a misapprehension should exist.

A solid body presents to the eye nothing but a certain disposition of colours and light. We may imagine ourselves to see the prominencies or cavities in such bodies, when in truth we see only the light or the shade, occasioned by them. This light and shade, however, we learn by experience to consider as the sign of a certain solid figure.

A proof of the truth of this statement is, that a painter by carefully imitating the distribution of light and shade, which he sees in objects, will make his work very naturally and exactly represent not only the general outline of a body, but its prominencies, depressions, and other irregularities. And yet his delineation, which by the distribution of light and shade gives such various representations, is on a smooth and plain surface.

It was a problem submitted by Mr. Molyneux to Mr. Locke, whether a blind man, who has learnt the difference between a cube and a sphere by the touch, can, on

being suddenly restored to sight, distinguish between them, and tell, which is the sphere and which is the cube, by the aid of what may be called his *new* sense merely? And the answer of Mr. Locke was in agreement with the opinion of Molyneux himself, that he cannot. The blind man knows what impressions the cube and sphere make on the organ of *touch*, and by that sense is able to distinguish between them; but as he is ignorant what impression they will make on the organ of sight, he is not able by the latter sense alone to tell, which is the round body, and which is the cubic.

It was remarked, that solid bodies present to the eye nothing but a certain disposition of light and colours.—It seems to follow from this, that the first idea, which will be conveyed to the mind on seeing a globe will be that of a circle, variously shadowed with different degrees of light. This imperfect idea is corrected in this way. Combining the suggestions of the sense of touch with those of sight, we learn by greater experience what kind of appearance solid convex bodies will make to us. That appearance becomes to the mind the sign of the presence of a globe; so that we have an idea of a round body by a very rapid mental correction, whereas the notion first conveyed to the mind is truly that of a plane, circular surface, on which there is a variety in the dispositions of light and shade. It is an evidence of the correctness of this statement, that in paintings plane surfaces, variously shaded, represent convex bodies and with great truth and exactness.

It appears then, that extension and figure are originally perceived, not by sight, but by touch. We do not judge of them by sight, until we have learnt by our experience, that certain visible appearances always accompany and signify the existence of extension, and of figure. This knowledge we acquire at a very early period in life, so much so, that we lose in a great measure the memory both of its commencement and progress.

§. 177. *Measurements of magnitude by the eye.*

What has been said naturally leads us to the consideration of MAGNITUDE. This is a general term for Extension when we conceive of it not only as limited or bounded, but as related to, and compared with other objects. Although we make use of the eye in judging of it, it is to be kept in mind, that the knowledge of magnitude is not an original intimation of the sight, but is at first acquired by the aid of touch. So well known is this, that it has been common to consider Magnitude under the two heads of tangible or real, and visible or apparent; the tangible magnitude being always the same, but the visible varying with the distance of the object. A man of six feet stature is always that height, whether he be a mile distant, or half a mile, or near at hand; the change of place making no change in his real or tangible magnitude. But the visible or apparent magnitude of this man may be six feet or not one foot, as we view him present with us and immediately in our neighborhood, or at two miles' distance; for his magnitude appears to our eye greater or less, according as he is more or less removed.——Hence the general principle, that of two objects equally distant, that, which has the greatest visible magnitude, is supposed to have the greatest tangible magnitude.

Among the multitude of instances, which might be adduced in illustration of this principle, the following statement to be found in the seventh number of the Edinburgh Journal of Science, is a striking one. In examining a dioramic representation of the inside of Rochester cathedral, which produced the finest effect from the entire exclusion of all extraneous light and of all objects, excepting those on the picture itself, the writer of the statement referred to was struck with an appearance of distortion in the perspective, which he ascribed to the canvass not hanging vertically. Upon mentioning this to the gentleman, who exhibited the picture, he offered to walk in front of it, and strike its surface with the palm of his hand, to show that the canvass was freely suspended.

Upon doing this, a very remarkable deception, or illusion rather, took place. As his hand passed along, it gradually became larger and larger, till it reached the middle, when it became enormously large. It then diminished, till it reached the other end of the canvass.

As the hand moved towards the middle of the picture, it touched the parts of the picture more and more remote from the eye of the observer; and consequently the mind referred the hand and the object in contact with it to the same remote distance; and consequently gave it a fictitious magnitude, corresponding with the visible figure it presented, combined with the supposition of its being placed at a distance. (See Edin. Journ. of Science, No. VII, p. 90, and Art. Science, Edin. Ency.)

§. 178. *Of objects seen in the mist and of the sun and moon in the horizon.*

In accordance with the above mentioned principle it happens, that objects, seen by a person in a mist, seem larger than the life. Their faint appearance rapidly conveys to the mind the idea of being considerably removed although they are actually near to us. And the mind immediately draws the conclusion, (so rapidly as to seem a simple and original perception,) that the object, having the same visible or apparent magnitude, and yet supposed to be at a considerable distance, is greater than other objects of the same class. So that it is chiefly the view of the mind, a law or habit of the intellect, which in this particular case gives a fictitious expansion to bodies; although it is possible, that the result may in part be attributed to a difference in the refraction of the rays of light, caused by their passing through a denser and less uniform medium than usual.

These remarks naturally remind us of the well known fact, that the sun and moon seem larger in the horizon than in the meridian. Two reasons may be given for this appearance; and perhaps ordinarily they are combined together.—(1) The horizon may seem more distant than the zenith, in consequence of intervening objects.

We measure the distance of objects in part by means of those that are scattered along between, and any expanse of surface, where there are no such intervening objects, appears to us of less extent than it actually is. Now if the rays of light form precisely the same image in the eye, but the source of them is supposed to be further off in the horizon than in the zenith, such have been our mental habits that the object in the horizon will probably appear the largest.—(2) Another reason of the enlarged appearance of the sun and moon in the horizon is, that the rays from them fall on the body of the atmosphere obliquely, and of course are reflected downwards towards the beholder, and subtend a larger angle at his eye. Hence, as we always see objects in the direction of the ray just before it enters the eye, if we follow the rays back in the precise direction of their approach, they will present to the eye the outlines of a larger object as their source, than they would if they had not been refracted.—When the atmosphere is not clear, but unusual masses of vapour are accumulated in it, whether immediately around us or any where else in the direction of the rays, the refraction is increased, and the object proportionally enlarged. This circumstance helps to explain the fact of the enlargement not being uniform, but sometimes greater and at others less. It may be added, that, on a principle practically the same with that of refraction, there will be an increased enlargement, when the disc of the sun or moon is seen through distant woods; the rays being separated and turned out of their course by the trunks and branches.

§. 179. *Of the estimation of distance by sight.*

We are next led to the consideration of distances as made known and ascertained by the sight. By the distance of objects, when we use the term in reference to ourselves, we mean the space, which is interposed between those objects and our own position. It might be objected, that space interposed is only a synonymous expression for the thing to be defined. Nevertheless no one can be supposed to be ignorant of what is meant. Even blind men

have a notion of distance, and can measure it by the touch, or by walking forward until they meet the distant object.

The perception of distance by the sight is an acquired and not an original perception; although the latter was universally supposed to be the fact, until comparatively a recent period.

All objects in the first instance appear to touch the eye; but our experience has corrected so many of the representations of the senses before the period, which we are yet able to retrace by the memory, that we cannot prove this by a reference to our own childhood and infancy. It appears, however, from the statement of the cases of persons born blind on the sudden restoration of their sight.

"When he first saw, (says Cheselden, the anatomist, when giving an account of a young man, whom he had restored to sight, by couching for the cataract,) he was so far from making any judgment about distance, that he thought all objects touched his eye, as he expressed it, as what he felt did his skin; and thought no object so agreeable as those, which were smooth and regular, although he could form no judgment of their shape or guess what it was in any object, that was pleasing to him."

This anatomist has further informed us, that he has brought to sight several others, who had no remembrance of ever having seen; and that they all gave the same account of their learning to see, as they called it, as the young man already mentioned, although not in so many particulars; and that they all had this in common, that having never had occasion to move their eyes, they knew not how to do it, and, at first, could not at all direct them to a particular object; but in time they acquired that faculty though by slow degrees.

Blind persons when at first restored to sight, are unable to estimate the distance of objects by that sense, but soon observing, that certain changes in the visible appearance of bodies always accompany a change of distance,

they fall upon a method of estimating distance by the visible appearance. And it would no doubt be found, if it could be particularly examined into, that all mankind come to possess the power of estimating the distances of objects by sight in the same way. When a body is removed from us and placed at a considerable distance, it becomes smaller in its visible appearance, its colours are less lively, and its outlines less distinct; and we may expect to find various intermediate objects, more or fewer in number corresponding with the increase of the distance, showing themselves between the receding object and the spectator. And hence it is, that a certain visible appearance comes to be the sign of a certain distance.

Historical and landscape painters are enabled to turn these facts to great account in their delineations. By means of dimness of colour, indistinctness of outline, and the partial interposition of other objects, they are enabled apparently to throw back to a very considerable distance from the eye those objects, which they wish to appear remote. While other objects, that are intended to appear near, are painted vivid in colour, large in size, distinct in outline; and are separated from the eye of the spectator by few or no intermediate objects.

§. 180. *Of the estimation of distance when unaided by intermediate objects.*

As we depend in no small degree upon intermediate objects in forming our notions of distance, it results, that we are often much perplexed by the absence of such objects. Accordingly we find, that people frequently mistake, when they attempt to estimate by the eye the length or width of unoccupied plains and marshes, generally making the extent less than it really is. For the same reason they misjudge of the width of a river, estimating its width at half or three quarters of a mile at the most, when it is perhaps not less than double that distance. The same holds true of other bodies of water; and of all other things, which are seen by us in a horizontal position, and under similar circumstances.

We mistake in the same way also in estimating the height of steeples, and of other bodies, that are perpendicular, and not on a level with the eye, provided the height be considerable. As the upper parts of the steeple outtop the surrounding buildings, and there are no contiguous objects with which to compare it, any measurement taken by the eye must be inaccurate, but is generally less than the truth.

Hence perhaps it is, that a man on the top of a steeple appears smaller to those below, than the same man would seem to the same person, and at the same distance on level ground. A man on the earth's surface, placed at the same distance, would probably appear nearly of his actual size. As we have been in the habit of measuring horizontal distances by the eye, we can readily form a nearly accurate opinion, whether a person be at an hundred feet distance, or more or less ; and the mind immediately makes an allowance for this distance, and corrects the first visual representation of the size of the person so rapidly that we do not remember it. But having never been in the habit of measuring perpendicular distances, the mind is at a loss, and fails to make that correction, which it would readily, and, as it were, intuitively make in the case of objects on level ground. The mistake therefore of his supposed nearness, combined with this perplexity, causes the comparative littleness of the man on the steeple.

The fixed stars, when viewed by the eye, all appear to be alike indefinitely and equally distant. Being scattered over the whole sky, they make every part of it seem like themselves at an indefinite and equal distance, and, therefore contribute to give the whole sky the appearance of the inside of a sphere. Moreover, the horizon seems to the eye to be further off than the zenith ; because between us and the former there lie many things, as fields, hills, and waters, which we know to occupy a great space ; whereas between us and the zenith there are no considerable things of known dimensions. And, therefore, the heavens appear like the segment of a sphere, and less than a hemisphere, in the centre of which we seem to stand.—

And the wider our prospect is, the greater will the sphere appear to be and the less the segment.

In connection with what has been said, we are led to make this further remark, that a change in the purity of the air will perplex in some measure those ideas of distance which we receive from sight. Bishop Berkeley remarks while travelling in Italy and Sicily, he noticed, that cities and palaces, seen at a great distance, appeared nearer to him by several miles than they actually were. The cause of this he very correctly supposed to be the purity of the Italian and Sicilian air, which gave to objects at a distance a degree of brightness and distinctness, which, in the less clear and pure atmosphere of his native country, could be observed only in those towns and separate edifices, which were near. At home he had learnt to estimate the distance of objects by their appearance; but his conclusions failed him, when they came to be applied to objects in countries, where the air was so much clearer.—— And the same thing has been noticed by other travellers, who have been placed in the like circumstances.

§. 181. *Of the senses considered as a foundation of belief and knowledge.*

It may be proper to recur here to the subject of the senses, considered as one of the great sources of belief and knowledge. This is a topic of so much importance as to justify repeated efforts to place it on a right foundation and to do away objections. It may be asserted without fear of contradiction, that we find in the daily conduct of men abundant evidence, that the senses are the foundation, to a great extent, of their opinions, reasonings, and actions. That objections have been made to a reliance on the testimony of the senses is true; and we have already endeavored to answer them, and place their futility in the true light. But in connection with the view, which has now been taken of the senses, we are especially prepared to express anew the sentiments, expressed in a former section on this subject, that each of the senses has its allotted sphere, its appropriate acts and responsibilities.

This is an important idea in making up a proper estimation of the senses, considered as a source of belief.

The imperfect examination of the senses, which we have just gone through, evinces the truth of this remark. It is the business, the appropriate function of the sense of smelling to give us a knowledge of the odours of bodies. When we have these sensations, we may be led from some principle of the mind to look for the cause of them, but nothing more. We do not learn from it what that cause is. It is not pretended, that this sense alone can give us the notion of an external, odoriferous body. The sense of taste is equally limited with that of smell, but both, as far as they go, are grounds of knowledge, and do not deceive. It might no doubt be said, that they may be diseased, and thus mislead us; but the remarks of this section go on the supposition, that the senses are in a sound state.——When we come to the sense of hearing, we find, that the perceptions of sound have in part an acquired character. The reference of a particular sound to a particular external cause always implies the previous exercise of the sense of touch, also the exercise of that principle of the mind, which is termed association, and of an act of the judgment. But hearing, when in a sound state, is always a ground of belief and knowledge, as far as the mere sensation of sound is concerned; and so far can be most certainly trusted.

It is the appropriate business of the sense of sight, against the testimony of which so many objections have been made, to render us acquainted with the colours of bodies. To say, therefore, that it leads us into errours in respect to solidity, extension, size, direction, or distance, is but very little, or rather nothing to the purpose. These are acquired perceptions, and have their origin in another sense, that of touch. The visual sensations are in these cases mere signs of the knowledge, which we have from another source. When therefore we separate what belongs to the sight from what belongs to the touch, and distinguish between them, it is impossible to fix the charge of misrepresentation upon either.

And hence on the question, Whether our senses mislead us, we are always to consider, to which of the senses the particular ideas under review appropriately belong. And in all cases when we are searching after truth, it becomes us to call in the aid of all the senses, and not to consult one to the entire omission of the others. They all make parts of one great and wonderful system, and cannot be safely separated. When they are in a sound state, when the ideas, of which they are the origin, are properly discriminated, and further, when the intimations of one sense are aided by those of another and by the guidance of the reasoning power, which clearly ought not to be excluded, we may then confidently expect to be led by them into the truth, so far as our Creator designed, that it should be made known to us.

§. 182. *Illustrations of the subject of the preceding section.*

The views of the last section admit of some illustration in respect to the sun and moon. Those heavenly bodies, as they come under the cognizance of the sight, appear to be very small, but in point of fact are known to be very large. Still in this very instance, (although this is one of the cases most frequently referred to by the expositors of the alleged weakness and errours of the senses,) it cannot be shown, that there is any deception practised upon us by that sense. It has sufficiently appeared, that extension, figure, the magnitude, and the distance of bodies are not direct objects of sight, and that our notions of them are not original in that sense, but are acquired. While therefore we have a direct acquaintance with colours by means of sight, it happens that, in estimating the distance of objects by the same sense, we are obliged to call in the aid of the intimations of the touch, and to make use also of comparison and judgment. And hence we are able to fix on this general principle, that the apparent magnitude of an object will vary with its distance.

It is clear, therefore, that there is no deception practised upon us. When by such calculations as we are able to make, we have ascertained the distance of the sun and

moon, then every one is satisfied, that their apparent magnitude or their appearance to the eye is just such as it should be; and that the eye gives to us precisely the same representation as in any other instance of visible objects presented to it. It gives such a view of the object as it was designed to give; and teaches us here the same as it teaches us constantly.

There are many instances, where the subject might be placed in the true light, and where it would clearly appear, how far our knowledge from the senses extends, and in what respects we must derive knowledge from some other source. It is well known, (to take an illustration not unfrequently referred to by writers,) that the vibrations of a pendulum are affected by its geographical position, the latitude where it is. Before this fact was ascertained, a person might readily have employed a pendulum of a given length as a measure of comparative duration at two distant points on the globe's surface. And when he had done this, he might have been disposed to declare on the authoriy of his senses and personal observation, that two portions of time, measured in different latitudes, were the same, although they were in fact different.

But here comes the question, Are his senses to blame for this mistake? Not at all. The testimony of the senses and of observation, as far as it went, was correct. The mistake is evidently to be attributed to erroneous deduction. The conclusion was bottomed on the great and undoubted principle in reasoning, that the laws of nature are uniform. But then there were various assumptions in this particular case, viz, that the earth is circular and not a spheroid, that the same quantiy of the attractive force of the earth operates on the pendulum at every point on the earth's surface, &c. Here is the foundation of the mistake; in certain facts precipitately assumed as grounds of reasoning, and in the deductions from them, and not in the senses.——Such instances, which might be multiplied to almost any extent, tend to confirm the doctrine, that the senses are justly regarded as an elementary law of belief, and that they are foundations of real knowledge.

CHAPTER SEVENTH.

HABITS OF SENSATION AND PERCEPTION.

§. 183. *Of the law of habit in general and its applications.*

In almost every step of the mind's history we find applications of the Law of Habit, the outlines of which have already been treated of. The general principle, laid down as involved in that Law, was this, that the repetition of any act, whether mental or bodily, increases the tendency to and the facility of that act. Of course it is a very different thing from mere Association, with which Dr. Brown seems to have confounded it. So far from being identical with association, the latter is under certain circumstances greatly controlled and directed by it; a fact, which clearly implies a distinction in the two.

And it may be necessary to recall to mind here, that there is a difference, not only in this but in all cases, between a LAW of the mind, and its SUSCEPTIBILITIES, although sometimes the same name is given to both. (See §. 47.) Habit accordingly is not to be regarded in the light of a mental power, but rather as a general principle or fact, applicable to the action of such powers as the mind possesses. It extends in its operation, as has been intimated, not only to the cognitive part of our nature, but to the heart; to the emotions and passions as well as the thoughts and intellections; to the whole mind and even to

the body. As we pass along from the consideration of the mind as influenced by outward objects to the consideration of it, as influenced by its own inward acts, and from the intellectual to the sentient, or as it is sometimes termed, the active part of our constitution, we shall find evidence of this. And the discovery will unfold views of human nature of the most practical kind, without coming short of the highest degree of interest. In the present connection we are to consider Habit in its relation to SENSATION and PERCEPTION; in other words as applicable to the mental acts, considered as caused by outward objects through the medium of the senses.

§. 184. *Of habit in relation to the smell.*

We shall consider the application of the principle to the senses in the same order that has already been observed. In the first place, there are habits of Smell.——This sense like the others is susceptible of cultivation. As there are some persons, whose power of distinguishing the difference of two or more colours is feeble; so there are some, who are doubtful and perplexed in like manner in the discrimination of odours. And as the inability may be overcome in some measure in the former case, so it may be in the latter. The fact, that the powers of which the smell is capable are not more frequently brought out and quickened is owing to the circumstance, that it is not ordinarily needed. It sometimes happens, however, that men are compelled to make an uncommon use of it, when by a defect in the other senses they are left without the ordinary helps to knowledge. It is then we see the effects of the law of Habit. It is stated in Mr. Stewart's Account of James Mitchell, who was deaf, sightless, and speechless, and of course strongly induced by his unfortunate situation to make much use of the sense we are considering, that his smell would immediately and invariably inform him of the presence of a stranger, and direct to the place where he might be; and it is repeatedly asserted, that this sense had become in him extremely acute.

In an interesting account of a deaf, dumb, and blind girl in the Hartford Asylum recently published, statements are made on this subject of a similar purport.—"It has been observed (says the writer) of persons, who are deprived of a particular sense, that additional quickness, or vigour seems to be bestowed on those which remain. Thus blind persons are often distinguished by peculiar exquisiteness of touch, and the deaf and dumb, who gain all their knowledge through the eye, concentrate, as it were, their whole souls in that channel of observation. With her whose eye, ear, and tongue are alike dead, the capabilities both of touch and smell are exceedingly heightened. Especially the *latter* seems almost to have acquired the properties of a new sense, and to transcend the sagacity even of a spaniel."—Such is the influence of habit on the intimations of the sense under consideration.

§. 185. *Of habit in relation to the taste.*

The same law is applicable to the Taste. We see the results of the frequent exercise of this sense in the quickness, which the dealer in wines discovers in distinguishing the flavour of one wine from that of another. It is no secret also what a wonderful perception of this kind professed epicures acquire. If it were not a law of our nature, that our sensations become acute and discriminating by repeated exercise, how many reputations of cooks and confectioners would have been saved; and how many grave discussions over the birds of the air and the fishes of the sea would have fallen to the ground for lack of argument!

Another practical view of this subject, however, presents itself here. The sensations, which we experience in this and other like cases, not only acquire by repetition greater niceness and discrimination, but increased strength; (and perhaps the increased strength is in all instances the foundation of the greater power of discrimination.) On this topic we have a wide and melancholy source of illustration. The bibber of wine and the drinker of ardent spirits readily acknowledge,

that the sensation was at first only moderately pleasing, and perhaps in the very slightest degree. Every time they carried the intoxicating potion to their lips, the sensation grew more pleasing, and the desire for it waxed stronger. Perhaps they were not aware that this process was going on in virtue of a great law of humanity; but they do not pretend to deny the fact. They might indeed have suspected at an early period, that chains were gathering around them, whatever might be the cause; but what objection had they to be bound with links of flowers; delightful while they lasted, and easily broken when necessary! But here was the mistake. Link was added to link; chain was woven with chain, till he who boasted of his strength, was at last made sensible of his weakness, and found himself a prisoner, a captive, a deformed, altered, and degraded slave.

There is a three-fold operation. The sensation of taste acquires an enhanced degree of pleasantness; the feeling of uneasiness is increased in a corresponding measure, when the sensation is not indulged by drinking; and the desire, which is necessarily attendant on the uneasy feeling, becomes in like manner more and more imperative. To alleviate the uneasy feeling and this importunate desire, the unhappy man goes again to his cups, and with a shaking hand pours down the delicious poison. What then? He has added a new link to his chain; at every repetition it grows heavier and heavier; till that, which at first he bore lightly and cheerfully, now presses him like a coat of iron, and galls like fetters of steel. There is a great and fearful law of his nature bearing him down to destruction. Every indulgence is the addition of a new weight to what was before placed upon him, thus lessening the probability of escape, and accelerating his gloomy, fearful, and interminable sinking. We do not mean to say, that he is the subject of an implacable destiny, and cannot help himself. But it would seem, that he can help himself only in this way; by a prompt, absolute, and entire suspension of the practice in all its forms, which has led him into this extremity. But few however have

the resolution to do this; the multitude make a few unwilling and feeble efforts, and resign themselves to the horrors of their fate.

Some years since there was a pamphlet published in England, entitled the Confessions of a Drunkard. The statements made in it are asserted on good authority to be authentic. And what does the writer say?—"Of my condition there is no hope that it should ever change; the waters have gone over me; but out of the black depths could I be heard, I would cry out to all those who have but set a foot in the perilous flood. Could the youth to whom the flavour of his first wine is delicious as the opening scenes of life, or the entering upon some newly discovered paradise, look into my desolation, and be made to understand what a dreary thing it is, when a man shall feel himself going down a precipice with open eyes and a passive will,—to see his destruction, and have no power to stop it, and yet to feel it all the way emanating from himself; to perceive all goodness emptied out of him, and yet not be able to forget a time when it was otherwise; to bear about the piteous spectacle of his own self ruins:—could he see my fevered eye, feverish with last night's drinking, and feverishly looking for this night's repetition of the folly; could he feel the body of the death out of which I cry hourly, with feebler and feebler outcry, to be delivered——it were enough to make him dash the sparkling beverage to the earth in all the pride of its mantling temptation."*

§. 186. *Of habit in relation to the hearing.*

There is undoubtedly a natural difference in the quickness and discrimination of hearing. This sense is more acute in some than in others; but in those, who possess it in much natural excellence, it is susceptible of a high degree of cultivation. Musicians are a proof of this, whose sensibility to the melody and concord of sweet sounds continually increases with the practice of their art.

This increase of sensibility in the perceptions of hearing

* London Quarterly Review, Vol. XXVII, p. 120.

is especially marked and evident, when uncommon causes have operated to secure such practice. And this is the state of things with the Blind. The readers of Sir Walter Scott may not have forgotten the blind fiddler, who figures so conspicuously with verse and harp in Red Gauntlet; a character sufficiently extraordinary, but by no means an improbable exaggeration. The blind necessarily rely much more than others on the sense of hearing. By constant practice they increase the accuracy and power of its perceptions. Shut out from the beauties that are seen, they please themselves with what is heard, and greedily drink in the soul of song. Accordingly music is made by them not only a solace, but a business and a means of support; and in the institutions for the Blind this is considered an important department of instruction.

Many particular instances on record and well authenticated confirm the general statement, that the ear may be trained to habits, and that thus the sensations of sound may come to us with new power and meaning. It is related of a celebrated blind man of Puiseaux in France, that he could determine the quantity of fluid in vessels by the sound it produced while running from one vessel into another. Any person may ascertain the presence and approach of another without seeing him by the mere sound of his voice; but there have been blind men, who were capable in consequence of being obliged from the lack of sight to rely much on the hearing, of ascertaining the same thing from the sound of their tread. Dr. Saunderson, who became blind so early as not to remember having seen, when happening in any new place, as a room, piazza, pavement, court, and the like, gave it a character by means of the sound and echo from his feet, and in that way was able to identify pretty exactly the place, and assure himself of his position afterwards. A writer in the First Volume of the Manchester Philosophical Memoirs, who is our authority also for the statement just made, speaks of a certain blind man in that city as follows;—"I had an opportunity of repeatedly observing the peculiar manner, in which he arranged his ideas, and acquired

his information. Whenever he was introduced into company, I remarked that he continued sometime silent. The sound directed him to judge of the dimensions of the room; and the different voices, of the number of persons that were present. His distinction in these respects was very accurate; and his memory so retentive, that he was seldom mistaken. I have known him instantly recognize a person, on first hearing him, though more than two years had elapsed since the time of their last meeting. He determined pretty nearly the stature of those he was conversing with, by the direction of their voices; and he made tolerable conjectures respecting their tempers and dispositions, by the manner in which they conducted their conversation."

§. 187. *Application of habit to the touch.*

The sense of touch like the others may be exceedingly improved by habit. The more we are obliged to call it into use, the more attention we pay to its intimations. By the frequent repetition therefore under such circumstances, these sensations not only acquire increased intenseness in themselves; but particularly so in reference to our notice and remembrance of them. But it is desirable to confirm this, as it is all other principles from time to time laid down, by an appeal to facts, and by careful inductions from them.

Diderot relates of the blind man of Puiseaux mentioned in the former section, that he was capable of judging of his distance from the fire-place by the degree of heat, and of his approach to any solid bodies by the action or pulse of the air upon his face. The same thing is recorded of many other persons in a similar situation; and it may be regarded, as a point well established, that blind people, who are unable to see the large and heavy bodies presenting themselves in their way as they walk about, generally estimate their approach to them by means of the increased resistance of the atmosphere. A blind person, owing to the increased accuracy of his remaining senses, especially of the touch, would be better trusted to go

through the various apartments of a house in the darkness of midnight, than one possessed of the sense of seeing without any artificial light to guide him.

In the celebrated Dr. Saunderson, who lost his sight in very early youth, and remained blind through life, although he occupied the professorship of mathematics in the English University of Cambridge, the touch acquired such accuteness, that he could distinguish, by merely letting them pass through his fingers, spurious coins, which were so well executed as to deceive even skilful judges who could see.†

The case of a Mr. John Metcalf, otherwise called Blind Jack, which is particularly dwelt upon by the author of the Article in the Memoirs just referred to, is a striking one. The writer states, that he became blind at an early period; but notwithstanding, followed the profession of a waggoner and occasionally of a guide in intricate roads, during the night, or when the tracks were covered with snow. At length he became a projector and surveyor of highways in difficult and mountainous districts; an employment, for which one would naturally suppose a blind man to be but indifferently qualified. But he was found to answer all the expectations of his employers, and most of the roads over the peak in Derbyshire in England were altered by his directions. Says the person, who gives this account of Blind Jack, "I have several times met this man with the assistance of a long staff traversing the roads, ascending precipices, exploring vallies, and investigating their several extents, forms, and situations, so as to answer his designs in the best manner."

In the interesting Schools for the Blind, which have been established in various parts of Europe, the pupils read by means of the fingers. They very soon learn by the touch to distinguish one letter from another, which are made separately for that purpose of wood, metals, or other materials. The printed sheets which they use are conformed to their method of studying them. The types are much larger than those ordinarily used in printing;

† Memoirs of Manchester Philos. Society, Vol. I. p. 164.

the paper is very thick, and being put upon the types while wet, and powerfully pressed, the letters on it are consequently *raised*, and appear in relief. The pupils having before learnt to distinguish one letter from another, and also to combine them into syllables and words, are able after a time to pass their fingers along the words and sentences of these printed sheets, and ascertain their meaning with a good degree of rapidity.

Perhaps it may occasion some surprise, when we add, that men may not only read by the touch, but may even find a substitute for the hearing in that sense. Persons, who were entirely deaf, have in some instances discovered a perception of the proportion and harmony of sounds.

"It will scarcely be credited (says an English writer, speaking of one in that situation,) that a person thus circumstanced should be fond of music; but this was the fact in the case of Mr. Arrowsmith. He was at a gentleman's glee club, of which I was president at that time, and as the glees were sung, he would place himself near some article of wooden furniture, or a partition, door, or window shutter, and would fix the extreme end of his finger nails, which he kept rather long, upon the edge of some projecting part of the wood, and there remain until the piece under performance was finished, all the while expressing by the most significant gestures, the pleasure he experienced from the perception of musical sounds. He was not so much pleased with a solo, as with a pretty full clash of harmony; and if the music was not very good, or, I should rather say, if it was not correctly executed, he would show no sensation of pleasure. But the most extraordinary circumstance in this case is, that he was most evidently delighted with those passages, in which the composer displayed his science in modulating the different keys. When such passages happened to be executed with precision, he could scarcely repress the emotions of pleasure which he received within any bounds; for the delight he evinced seemed to border on extacy."*

* London Quarterly Review, Vol. XXVI, p. 404.

§. 188. *Habits considered in relation to the sight.*

The law of habit affects the sight also. By a course of training this sense seems to acquire new power. The length and acuteness of vision in the mariner, who has long traversed the ocean, has been often referred to. There are numerous instances to the same effect, occasioned by the situations in which men are placed, and the calls for the frequent exercise of that sense. The almost intuitive vision of the skilful engineer is beyond doubt in most cases merely a habit. He has so often fixed his eye upon those features in a country, which have a relation to his peculiar calling, that he instantly detects the bearing of a military position, its susceptibility of defence, its facilities of approach and retreat, &c.

No man is born without the sense of touch, but many are born without the sense of hearing; and whenever this is the case, we are entitled to look for habits of sight. Persons under such circumstances naturally and necessarily rely much on the visual sense, whatever aids may be had by them from the touch. Hence habits; and these imply increased quickness and power, wherever they exist. It is a matter of common remark, that the keenness of visual observation in the DEAF and DUMB is strikingly increased by their peculiar circumstances. Shut out from the intercourse of speech, they read the minds of men in their movements, gestures, and countenances. They notice with astonishing quickness, and apparently without any effort, a thousand things, which escape the regards of others. This fact is undoubtedly the foundation of the chief encouragement, which men have to attempt the instruction of that numerous and unfortunate class of their fellow beings. They can form an opinion of what another says to them by the motion of the lips; and sometimes even with a great degree of accuracy. That this last however is common, it is not necessary to assert; that it is possible, we have the testimony of well authenticated facts. In one of his letters, Bishop Burnet mentions to this effect the case of a young lady of Geneva.——"At two years old

(he says) it was perceived, that she had lost her hearing, and ever since, though she hears great noises, yet hears nothing of what is said to her: but by observing the motion of the lips and mouths of others, she acquired so many words, that out of these she has formed a sort of jargon in which she can hold conversation, whole days, with those who can speak her language. She knows nothing of what is said to her, unless she sees the motion of their lips that speak to her: one thing will appear the strangest part of the whole narrative. She has a sister with whom she has practised her language more than with any body else, and in the night, by laying her hands on her sister's mouth, she can perceive by that what she says, and so can discourse with her in the dark." (London Quarterly Review, Vol. xxiv. p. 399.)

Such are the views, which have been opened to us, in considering the law of HABIT in connection with the senses; and we may venture to say with confidence, that they are exceedingly worthy of notice. There are two suggestions, which they are especially fitted to call up. They evince the striking powers of the human mind, its irrepressible energies, which no obstacles can bear down. They evince also the benevolence of our Creator, who opens in the hour of misery new sources of comfort, and compensates for what we have not, by increasing the power and value of what we have.

§. 189. *Sensations may possess a relative, as well as positive increase of power.*

There remains a remark of some importance to be made in connection with the general principle, which has been brought forward, and as in some measure auxiliary to it; for it will help to explain the more striking instances of habits, if any should imagine, that the fact of mere repetition is not sufficient to account for them. Our sensations and perceptions may acquire not only a direct and positive, but a relative and virtual increase of power.

This remark is thus explained. We shall hereafter see the truth of an important principle to this, effect, that

there will be a weakness of remembrance in any particular case in proportion to the want of interest in it. Now hundreds and thousands of our sensations and perceptions are not remembered, because we take no interest in them. Of course they are the same, relatively to our amount of knowledge and our practice, as if they had never existed at all. But when we are placed in some novel situation, or when in particular we are deprived of any one of the senses, the pressure of our necessities creates that interest, which was wanting before. Then we delay upon, and mark, and remember, and interpret a multitude of evanescent intimations, which were formerly neglected. They thus acquire a very considerable relative power and value. And in order to make out a satisfactory explanation of some instances of habits, it is perhaps necessary, that this relative increase should be added to the direct and positive augmentation of vigour and quickness, resulting from mere repetition or exercise.

§. 190. *Whether the mind can attend to more than one object at the same time.*

In connection with what has been said in this chapter, we are in some degree prepared to consider the question, Whether the mind can attend to more than one thing at one and the same instant? The question can perhaps be stated more clearly thus; Whether the mind can attend at one and the same instant to objects, which we can attend to separately?—The question, when proposed as here, without any limitation, hardly admits a discussion. If a rose is presented to us, we can handle it; we can inhale its fragrance, and behold its colours at the same moment. The mind exists in the states of seeing, smelling, and feeling at once; that is to say, it is in a complex state. Whereas if the question, as above stated, were answered in the negative, complexity in the states of the mind would be an impossibility.

But the question may be further simplified, and proposed thus; viz. Whether we can, *by means of one and the same sense*, simultaneously notice and attend to more than one

object, which objects that sense is capable of attending to separately?—When the question is modified and stated in this way, it seems to be the general sentiment, that the mind notices only one thing at a time.

§. 191. *On attending at the same time to different parts of music.*

But there are certain facts, which at first sight contradict this doctrine, however generally it may have been entertained. For instance, it is the opinion with very many persons, that, in a concert of music, a good ear can attend to different parts at the same time, and feel the full effect of the harmony. It is not denied, that they are fully able to feel the effect of the harmony; and it is also admitted, that they appear to attend to the different parts, which combine to form that harmony, at one and the same instant. But this *appearance*, (for we conceive it to be merely such,) is to be thus explained.

It has appeared in the course of this chapter, that our sensations and external perceptions are susceptible of being strengthened and quickened. By various examples it has been seen, that they can be brought to an astonishing degree both of acuteness and rapidity of exercise. We may suppose, therefore, that a HABIT has been formed in the case under consideration, and that the mind passes from one part of the music to the other with such quickness, as to give us no perception of an interval of time. The operation is so rapid, and the attention so slight, that there is no remembrance, and we are unable to recal the mental acts. Hence we shall *seem* to be attending to all the parts at once. The apparent result will be the same, as if this were actually the fact. But as this mere appearance may be otherwise satisfactorily explained, it is not necessary to admit the doctrine of originally coexistent perceptions of distinct and separate sounds.

Nor is this all. It is to be remembered, that, in the case under consideration, one sense only, the sense of hearing, is employed. And it is a natural inquiry, if it can at-

tend to more than one object at once, which it is capable of attending to separately, why may it not attend to three, five, twenty, or more? An objection certainly arises here; and furthermore, the opinion, that the mind can simultaneously attend to separate objects by means of a single sense, strikes at the root of what there is abundant reason to consider a great and fixed law of our nature; viz. That the first intimations from the separate senses are simple, are uncompounded.

§. 192. *The principle considered in reference to the outlines and forms of objects.*

The inquiry, which has just been attended to, may be considered in reference to the outlines and forms of bodies. In discussing the subject of attention, Mr. Stewart, in connection with his views on that subject, introduces some remarks in respect to vision. He makes this supposition, That the eye is fixed in a particular position, and the picture of an object is painted on the retina. He then starts this inquiry; Does the mind perceive the complete figure of the object at once, or is this perception the result of the various perceptions we have of the different points in the outline?——He holds the opinion, that the perception is the result of our perceptions of the different points in the outline, which he adopts as naturally consequent on such views, as the following; the outline of every body is made up of points or smallest visible portions; no two of these points can be in precisely the same direction; therefore, every point by itself constitutes just as distinct an object of attention to the mind, as if it were separated by some interval of empty space from all other points. The conclusion, therefore, is, as every body is made up of parts, and as the perception of the figure of the whole object implies a knowledge of the relative situation of the different parts with respect to each other, that such perception is the result of a number of different acts of attention.

But if we adopt this ingenious explanation of Mr. Stewart, it is incumbent upon us to show how it happens,

that we appear to see the object at once? The answer is, that the acts of perception are performed with such rapidity, that the effect with respect to us is the same, as if it were instantaneous. A habit has been formed; the glance of the mind, in the highest exercise of that habit, is indescribably quick; there is no remembrance; time is virtually annihilated; and separate moments are to our apprehension of them crowded into one.

§. 193. *Notice of some facts which favour the above doctrine.*

There are various facts, which go to confirm Mr. Stewart's doctrine as to the mode of the perception of external objects.——When we look for the first time on any object, which is diversified with gaudy colours, the mind is evidently perplexed with the variety of percepsions which arise; the view is indistinct, which would not be the case, if there were only one, and that an immediate perception. And even in paintings, which are of a more laudable execution, the effects at the first perception will be similar.——But there is another fact, which comes still more directly to the present point. We find, that we do not have as distinct an idea, at the first glance, of a figure of an hundred sides, as we do of a triangle or square. But we evidently should, if the perception of visible figure were the immediate consequence of the picture on the retina, and not the combined result of the separate perceptions of the points in the outline. Whenever the figure is very simple, the process of the mind is so very rapid, that the perception seems to be instantaneous. But when the sides are multiplied beyond a certain number, the interval of time necessary for these different acts of attention becomes perceptible. We are then distinctly conscious, that the mind labours from one part of the object to another, and that some time elapses before we grasp it as a whole.

CHAPTER SEVENTH.

MUSCULAR HABITS.

§. 194. *Instances in proof of the existence of muscular habits.*

FROM habits, considered as affecting the senses, the transition is easy to MUSCULAR HABITS. On this subject therefore we shall now offer a few remarks.—Of the fact, that such habits exist, it is presumed no doubt can be generally entertained. Muscular habits may be detected in the gait and in the speech of men generally; they are found with specific characteristics in particular classes of men; every mechanic forms them, and they vary in their aspect with his particular business. Hence the enlarged and powerful neck of the porter, the strong and brawny arm of the blacksmith, and the particular habitudes of all their movements.

But we will not delay on this part of the subject any farther than to point out a familiar instance of it. It is one of the most general kind, is of the most common occurrence, and yet perhaps has not often been made the subject of particular attention.——Every man's hand writing is an instance, and a proof of Muscular habit. In acquiring that art, the muscles have undergone a complete system of instruction. That instruction and training they practically and most punctually regard ever afterwards; so much so that we can tell a man's writing, to which we

are accustomed, almost as readily as we recognize the man himself when we see him.—But this subject is introduced here, although the train of thought naturally led to it, not so much for its own sake, as in consequence of its connection with Volition.

§. 195. *Considered by some writers to be involuntary.*

It seems to have been the opinion of some writers, (among others of Drs. Reid and Hartley,) that bodily or muscular habits operate in many cases without design and volition on the part of the person who has formed them; and that as they are without any attendant thought, without any preceding mental operation, such bodily acts are to be considered as purely mechanical or automatic. They endeavour to explain and confirm their views by the instance of a person, learning to play on the harpsichord. When a person first begins to learn, it is admitted by all, that there is an express act of volition, preceding every motion of the fingers. By degrees the motions appear to cling to each other mechanically; we are no longer conscious of volitions, preceding and governing them. In other words there is nothing left but the motions; there is no act of the mind; the performance, admirable as it is, has the same character and the same merit with that of the action of a well-contrived machine.

§. 196. *Objections to the doctrine of involuntary muscular habits.*

In replying to these views, it may be safely admitted, that, in playing the harpsichord and some other musical instruments, we have not always a distinct remembrance of volitions, and consequently the muscular effort has sometimes the appearance of being independent of the will. But this mere appearance is not sufficient to command our assent to the doctrine advanced by these writers, until the four following objections be set aside.

(1) The supposition, that the acts in question are automatic, is unnecessary. If it be true, as we have repeat-

edly seen so much occasion to believe, that Habit is a general law of our nature, then it may be regarded as applicable not only to the muscular efforts, but to the preceding *volitions* themselves. It is implied in this view, (supposing it to be a correct one,) that such volitions may be very rapid, so as scarcely to arrest our attention a moment. Now the natural result of such slight attention will be, that they will exist and pass away without being remembered. These considerations are sufficient to explain the mere appearance, which is admitted to exist, but which Reid and Hartly attempt to explain by an utter denial of the putting forth of volitions at all. But if this be the case, then the supposition, that the acts in question are automatic and involuntary, is an unnecessary one.

(2) The most rapid performers are able, when they please, to play so slowly, that they can distinctly observe every act of the will in the various movements of the fingers. And when they have checked their motions so as to be able to observe the separate acts of volition, they can afterwards so accelerate those motions, and of course so diminish the power, (or what may be regarded as the same thing, the time of attending to them,) that they cannot recal the accompanying volitions. This is the rational and obvious supposition, that there is not an exclusion of volitions, but an inability to recollect them, on account of the slight degree of attention. Any other view necessarily implies an inexplicable jumble of voluntary and involuntary actions in the same performance.

(3.) If there be no volitions, the action must be strictly and truly automatic; that is, it must, from the nature of the case, be the motion of a machine. It must always go on invariably in the same track, without turning to the right hand or to the left. If this be the case in playing the harpsichord, which is by no means probable, it is certainly not in some other instances of habits. It must be supposed, that there is as much rapidity of volition put forth by the rope dancer, the equilibrist, the equestrian actor of the circus,&c. as by the player on the harpsichord. Now if it be admitted, that the ordinary steps of the sin-

gular and surprising feats they perform are familiar to them, still the process is evidently not an invariable one. It may be pronounced impossible for them to perform experiments, which agree in every particular with preceding experiments. They are necessarily governed in their volitions and movements by a variety of circumstances, which arise on every particular occasion, and which could not be foreseen. Hence the muscular movements in these cases, being controlled by the will, are not mechanical; and as we have abundant reason to believe them often not less rapid in the performance, than the muscular movements are in playing the harpsichord, why should we consider these last mechanical and not voluntary?

(4) If the hypothesis of Reid and Hartley be true, then there is some general tendency or principle in our nature, by which actions originally voluntary are converted into mechanical actions. Nor will it be easy to show, why this principle should not extend further than mere bodily movements. It will be the result of this tendency to wrest all those powers which it reaches, whether bodily or mental, from the control of the will. In other words, when we consider the extent of its application, and its wonderful results, wherever it applies, we must conclude, that this principle will infallibly make men machines, mere automatons, before they have lived out half their days.—Such are some of the objections to the doctrine, that muscular habits are involuntary.

CHAPTER NINTH.

CONCEPTIONS.

§. 197. *Meaning of conceptions and how they differ from certain other states of the mind.*

We are now led, as we advance in the general subject of intellectual states of EXTERNAL ORIGIN, to contemplate the mind in another view, viz, as employed in giving rise to what are usually termed CONCEPTIONS. Without professing to propose a definition in all respects unexceptionable, we are entitled to say in general terms, that this name is given to any re-existing sensations whatever, which the mind has felt at some former period, and to the notions, which we frame of absent objects of perception. Whenever we have conceptions, our sensations and perceptions are replaced, as Shakspeare expresses it, in the "mind's eye," without our at all considering at what time, or in what place they first originated. In other words, they are revived and recalled, and nothing more.

Using therefore the term CONCEPTIONS to express a class of mental states, and in accordance with the general plan, having particular reference in our remarks here to such as are of external origin, it may aid in the better understanding of their distinctive character, if we mention more particularly, how they differ both from sensations and perceptions, and also from remembrances, with which last some may imagine them to be essentially the same.

I,—Conceptions differ from the ordinary sensations and perceptions in this respect, that both their causes and their objects are absent. When the rose, the honeysuckle, or other odoriferous body is presented to us, the effect, which follows in the mind, is termed a sensation. When we afterwards think of that sensation, (as we sometimes express it,) when the sensation is recalled even though very imperfectly, without the object which originally caused it being present, it then becomes, by the use of language, a conception. And it is the same in any instance of perception. When, in strictness of speech, we are said to perceive any thing, as a tree, a building, or a mountain, the objects of our perceptions are in all cases before us. But we may form conceptions of them, that may be recalled and exist in *the mind's eye*, however remote they may be in fact, both in time and place.

II,—They differ also from remembrances or ideas of memory. We take no account of the period, when those subjects, which laid the foundation of them were present; whereas in every act of the memory there is combined with the conception a notion of the past. Hence as those states of mind, which we call conceptions, possess these distinctive marks, they are well entitled to a separate name.

Conceptions being merely mental states or acts of a particular kind are regulated by the general laws of the intellect, and make their appearance and disappearance on the principles of association. Those principles have been explained in a former chapter.——Whenever at any time we may use the phrase "power of conception" or "faculty of conception," nothing more is to be understood by such expressions than this, that there is in the mind a susceptibility of feelings or ideas possessing the marks, which we have ascribed to this class.

§. 198. *Of conceptions of objects of sight.*

One of the striking facts in regard to our conceptions is, that we can far more easily conceive of the objects of some senses than of others. Suppose a person to have

travelled abroad, and to have seen among the achievements of human effort St. Peter's church, the Vatican, and the Pyramids, or to have visited among nature's still greater works the cataract of Niagara and the falls of St. Anthony, or any other interesting object of sight; it is well known, that the mind of this person afterwards even for many years very readily forms a conception of those objects. Such ideas are so easily and so distinctly recalled, that it is hardly too much to say of them, that they seem to exist as permanent pictures in the mind. It is quite different with a particular sound, which we have formerly heard, and with a particular taste, or any pleasant or painful sensations of the touch, which we have formerly experienced. When the original perceptions have in these last cases departed, we find that the ideas do not readily exist again in the absence of their appropriate objects, and never with the distinctness, which they possessed at first. Ideas of visible objects, therefore, are more readily recalled, or we can more easily form conceptions of such objects, than we can of the objects of the other senses.—This peculiarity in the case of visible objects may be thus partially explained.

Visible objects or rather the outlines of them are complex; that is, they are made up of a great number of points or very small portions. Hence the conception, which we form of such an object as a whole, is aided by the principles of association. The reason is obvious. As every original perception of a visible object is compound, made up of many parts, whenever we subsequently have a conception of it, the process is the same; we have a conception of a part of the object, and the principles of association help us in conceiving of the other parts. Association connects the parts together; it presents them to the mind in their proper arrangement, and helps to sustain them there.

We are not equally aided by the laws of association in forming our conceptions of the objects of the other senses. When we think of some sound, or taste, or touch, the object of our conception is either a single detached

sensation, or a series of sensations. In every such detached sound, or taste, or sensation of touch, whether we consider it at its first origin or when it is subsequently recalled, there is not of course that association of the parts, which we suppose to exist in every visual perception, and which must exist also in every conception of objects of sight, which subsequently takes place. Accordingly our conceptions of the latter objects arise more readily, and are more distinct than of the others.—There is a greater readiness and distinctness also, when there is a series of sensations and perceptions, for the visual conceptions are aided by association both in time and place, but the others only in time.

§. 199. *Of the influence of habit on our conceptions.*

It is another circumstance worthy of notice in regard to conceptions, that the power of forming them depends in some measure on habit.——A few instances will help to illustrate the statement, that what is termed Habit may extend to the susceptibility of conceptions; and the first to be given will be of conceptions of sounds. Our conceptions of sounds are in general very indistinct, as appeared in the last section. But a person may acquire the power of amusing himself with reading written music. Having frequently associated the sounds with the notes, he has at last such a strong conception of the sound that he experiences, by merely reading the notes, a very sensible pleasure. It is for the same reason, viz, because our associations are strengthened by habit, that readers may enjoy the harmony of poetical numbers without at all articulating the words. In both cases they truly hear nothing, but there is a virtual melody in the mind.

That our power of forming conceptions is strengthened by habit is capable of being further illustrated from the sight. A person, who has been accustomed to drawing, retains a much more perfect notion of a building, landscape, or other visible object, than one who has not. A portrait painter, or any person, who has been in the practice of drawing such sketches, can trace the outlines of the human form with very great ease; it requires hardly

more effort from them than to write their names.—This point may also be illustrated by the difference, which we sometimes notice in people in their conceptions of colours. Some are fully sensible of the difference between two colours when they are presented to them, but cannot with confidence give names to these colours when they see them apart, and may even confound the one with the other. Their original sensations or perceptions are supposed to be equally distinct with those of other persons; but their subsequent conception of the colours is far from being so. This defect arises partly at least from want of practice, that is, from their not having formed a habit. The persons, who exhibit this weakness of conception, have not been compelled by their situation, nor by mere inclination, to distinguish and to name colours so much as is common.

§. 200. *Of the subserviency of our conceptions to description.*

It is highly favorable to the talent for lively description, when a person's conceptions are readily suggested and are distinct. Even such an one's common conversation differs from that of those, whose conceptions arise more slowly, and are more faint. One man, whether in conversation or in written description, seems to place the object, which he would give us an idea of, directly before us; it is represented distinctly and to the life. Another, although not wanting in a command of language, is confused and embarrassed amid a multitude of particulars, which, in consequence of the feebleness of his conceptions, he finds himself but half acquainted with; and he, therefore, gives us but a very imperfect notion of the thing which he would describe.

It has been by some supposed, that a person might give a happier description of an edifice, of a landscape, or other object, from the conception than from the actual perception of it. The perfection of a description does not always consist in a minute specification of circumstances; in general the description is better, when there is a judicious selection of them. The best rule for making the se-

lection is, to attend to the particulars, that make the deepest impression on our own minds, or, what is the same thing, that most readily and distinctly take a place in our conceptions.—When the object is actually before us, it is extremely difficult to compare the impressions, which different circumstances produce. When we afterwards conceive of the object, we possess merely the outline of it; but it is an outline made up of the most striking circumstances. Those circumstances, it is true, will not impress all persons alike, but will somewhat vary with the degree of their taste. But when with a correct and delicate taste any one combines lively conceptions, and gives a description from those conceptions, he can hardly fail to succeed in it.

§. 201. *Of conceptions attended with a momentary belief.*

Our conceptions are sometimes attended with belief; when they are very lively, we are apt to ascribe to them a real outward existence, or believe in them. We do not undertake to assert, that the belief is permanent; but a number of facts strongly lead to the conclusion, that it has a momentary existence.

(1) A painter, in drawing the features, and bodily form of an absent friend, may have so strong a conception, so vivid a mental picture, as to believe for a moment that his friend is before him. After carefully recalling his thoughts at such times and reflecting upon them, almost every painter is ready to say, that he has experienced some illusions of this kind. It is true, the illusion is very short, because the intensity of conception, which is the foundation of it, can never be kept up long when the mind is in a sound state. Such intense conceptions are unnatural. And, further all the surrounding objects of perception, which no one can altogether disregard for any length of time, every now and then check the illusion and terminate it.

(2) When a blow is aimed at any one, although in sport, and he fully knows it to be so, he forms so vivid a conception of what might possibly be the effect, that his belief is for a moment controlled, and he unavoidably shrinks

back from it.——Again, place a person on the battlements of a high tower; his reason tells him he is in no danger; he knows he is in none. But after all he is unable to look down from the battlements without fear; his conceptions are so exceedingly vivid as to induce a momentary belief of danger in opposition to all his reasonings.

(3) When we are in pain from having struck our foot against a stone, or when pain is suddenly caused in us by any other inanimate object, we are apt to vent a momentary rage upon it. That is to say, our belief is so affected for an instant, that we ascribe to it an accountable existence, and would punish it accordingly. It was an impulse of human nature, (though doubtless a singular exhibition of it,) when Xerxes, falling into a transport of rage with the Hellespont for having broken up and washed away his bridge, ordered it to be beaten with three hundred stripes. It is on the principle of our vivid conceptions being attended with belief, that poets so often ascribe life, and agency, and intention to the rains and winds, to storms, and thunder, and lightning. How natural are the expressions of King Lear, overwhelmed with the ingratitude of his daughters, and standing with his old head bared to the pelting tempest!

"Nor rain, wind, thunder, fire are my daughters,
"I tax not you, ye elements, with unkindness;
"I never gave you kingdoms, called you children."

(4) There are persons, who are entirely convinced of the folly of the popular belief of ghosts and other nightly apparitions, but who cannot be persuaded to sleep in a room alone, nor go alone into a room in the dark. Whenever they happen out at night, they are constantly looking on every side; their quickened conceptions behold images, which never had any existence except in their own minds, and they are the subjects of continual disquiet and even terror.

"It was my misfortune, (says Dr. Priestly,) to have the idea of darkness, and the ideas of invisible malignant spirits and apparitions very closely connected in my infancy; and to this day, notwithstanding I believe nothing

of those invisible powers, and consequently of their connection with darkness, or any thing else, I cannot be perfectly easy in every kind of situation in the dark, though I am sensible I gain ground upon this prejudice continually."

In all such cases we see the influence of the prejudices of the nursery. Persons, who are thus afflicted, were taught in early childhood to form conceptions of ghosts, hobgoblins, and unearthly spirits; and the habit still continues. It is true, when they listen to their reasonings and philosophy, they may well say that they do not believe in such things. But the effect of their philosophy is merely to check their belief; not in one case in a thousand is the belief entirely overcome. Every little while, in all solitary places, and especially in the dark, it returns and when banished returns again; otherwise we cannot give an explanation of the conduct of these persons.

§. 202. *Conceptions which are joined with perceptions.*

The belief in our mere conceptions is the more evident and striking, whenever they are at any time joined with our perceptions.—A person walking in a field, (to take a familiar instance and which every one will understand,) in a thick foggy morning, perceives something, no matter what it is; but he believes it to be a man, and does not doubt it. In other words, he truly perceives some object, and, in additon to that perception, has a mental conception of a man, attended with belief. When he has advanced a a few feet further, all at once he perceives, that what he conceived to be a man is merely a stump with a few large stones piled on its top. He perceived at first, as plainly or but little short of it, that it was a stump, as in a moment afterwards; there were the whole time very nearly the same visible form and the same dimensions in his eye. But whatever he had in his eye, he certainly had in his mind the conception of a man, which overruled and annulled the natural effects of the visual perception; the conception being associated with a present visible object acquired peculiar strength and permanency, so much so that he

truly and firmly believed, that a human being was before him. But the conception has departed; the present object of perception has taken its place, and it is now impossible for him to conjure up the phantom, the reality of which he but just now had no doubt of.

In his Voyage of Discovery to the Arctic Regions, Capt. Ross mentions an incident, illustrative of the power and fruitfulness of our conceptions, when upheld by the actual presence of objects. It will be recollected, that the immense masses of ice, which are found floating in the polar seas, often display a variety of the most brilliant hues. Speaking of one of these ice-bergs as they are called, which he early fell in with, and which was about forty feet high and a thousand feet long, "imagination, he says, painted it in many grotesque figures; at one time it looked something like a white lion and horse rampant, which the quick fancy of sailors, in their harmless fondness for omens, naturally enough shaped into the lion and unicorn of the king's arms, and they were delighted accordingly with the good luck it seemed to augur."

But it is unnecessary to resort to books for illustrations of this topic. Multitudes of persons have a conceptive facility of creations, which is often troublesome and perplexing; especially in uncommon situations, and in the night. And in all cases this tendency is greatly strengthened, whenever it can lay hold of objects, the outlines of which it can pervert to its own purposes.

Many a person has waked up in the night and has firmly believed, that he saw a form clothed in white, standing in an erect position at some part of the room, but in a moment after the imaginary visitant has vanished, and there is nothing left but the reflection of the moonbeams on the wall.

In all cases of this kind, where the conceptions are upheld, as it were, by present objects of perception, and receive a sort of permanency from them, nothing is better known, than that we often exercise a strong and unhesitating belief. These instances, therefore, can properly be

considered as illustrating and confirming the views in the preceding section.

§. 203. *Of our conceptions at tragical representations.*

These observations suggest an explanation, at least in part, of the effects, which are produced on the mind by exhibitions of fictitious distress. In the representation of tragedies, it must be admitted, that there is a general conviction of the whole being but a fiction. But, although persons enter the theatre with this general conviction, it does not always remain with them the whole time. At certain passages in the poet peculiarly interesting, and at certain exhibitions of powerful and well-timed effort in the actor, this general impression, that all is a fiction, fails. The feelings of the spectator may be said to rush into the scenes; he mingles in the events; carried away and lost, he for a moment believes all to be real, and the tears gush at the catastrophe which he witnesses. The explanation, therefore, of the emotions felt at the exhibition of a tragedy, such as indignation, pity, and abhorrence, is, that at certain parts of the exhibition we have a momentary belief in the reality of the events, which are represented. And after the illustrations which have been given, such a belief cannot be considered impossible.——The same explanation will apply to the emotions, which follow our reading of tragedies when alone, or any other natural and affecting descriptions. In the world of conceptions, which the genius of the writer conjures up, we are transported out of the world of real existence, and for a while fully believe in the reality of what is only an incantation.

§. 204 *Application of these principles to diversities in the mental character of individuals.*

It is a remark sometimes made, that the sanguine are apt to believe and assert what they hope; and the timorous what they fear. This remark implies, and is founded in part on what every one knows, that there are diversities in the mental character of different individuals. Some are constitutionally fearful; every obstacle assumes

an undue importance, and every terror is magnified. Others are confident, fearless, ardent. Both of these classes of persons are known to commit frequent mistakes in judging of those things, which are future, and which have any connection with their respective mental characteristics.

The remarks, which were made in the three last sections, will help us to an explanation in this thing.——As to what is called BELIEF, it is presumed no one can be ignorant of it, although it would be futile to attempt to explain it by words. It is, however, important to remark, that belief is regulated and controlled, not by direct volition, but by the nature of the circumstances, which are placed before the mind. But it has been already sufficiently shown, that belief is in a measure under the control of our conceptions, when they are very vivid. It is also undoubtedly true, that vividness of conceptions is always attended with a strong feeling of pleasure, or of desire, or of some other kind. But it is implied in the mental characters of the persons, on whom we are remarking, that their feelings are strong, though opposite; in the one case, confident and ardent; in the other, dejected and timid.

Hence their conceptions will be strong. To the one, all difficulties and dangers will be magnified; to the other, the glory and the fruition of success. And as these distorted conceptions necessarily control more or less their belief, it will follow, that perfect reliance is not to be placed on their opinions, when they are directly connected either with their hopes or their fears. Nor will such distrust always imply an unfavorable opinion of the rectitude of their intentions.——(See, in connection with this subject, Reid's Essays on the Intellectual Powers, IV.; Stewart's Elements, CH. III.; Brown's Lectures, XLI; Priestley's Examination of Reid, SECT. VIII.; Kaime's Elements of Criticism, CHAP. II., &c.)

CHAPTER TENTH.

CASUAL ASSOCIATIONS.

§. 205. *Association sometimes misleads our judgments.*

It is necessary in this part of the history of the mind, to refer again particularly to the great law of Association. There are some cases, where the power of association so misleads us, that we cannot easily form a correct judgment of the true nature of things. Every object of thought, in order to be fully understood, ought to be so much in our power, that we may examine it separately from all other objects. Whenever, therefore, it happens from any circumstances, that the power of association so combines one object of thought with another, that the object cannot readily be looked at and examined by itself, it so far has the effect to perplex and hinder correct judgment.

It will be found, when we look into our minds, that there exist a few associations or combinations of thought of this kind, which are obstinate and almost invincible. To explain the origin, and to correct the erroneous tendencies of all such connections of thought, although the number of such as we have now in view cannot be large, would occupy us too long. The examination of a few somewhat striking instances will not only throw light on the philosophy of the mind in general, but will be of some practical benefit.——Other instances of CASUAL ASSOCIA-

TION, which have a less degree of strength, and exert a less considerable influence in disturbing the just exercise of the intellect, will require some examination hereafter. The whole subject of Prejudices, which has a conspicuous place in every practical system of Mental Philosophy, is necessarily taken up in a great degree with such cases.

§. 206. *Casual association in respect to the place of sensation.*

One of the casual associations of that extreme kind, which we have now especial reference to, concerns the place, or rather the supposed place of sensation.——All sensation, it will not be forgotten, is in the mind. Whatever is inanimate or material can of course have no feeling. Nevertheless if a wound be inflicted on the hand or foot, we seem to experience the sensation of pain in that particular place. When we merely bring the hand in contact with a warm or cold body, we even then assign a local habitation to the subsequent feeling, and it clearly seems to be, not in the mind, but in the hand.

This reference of the sensation to the outward organ and place, instead of thinking of it as existing in the soul, is the result of an early and strong association. As the wound in the hand for instance is the cause of the painful feeling, the consequence is, that the sensation, and the place whence it arose constantly go together in our thoughts. The result of this connection, which has been repeated and continued from our youth up, is that we find it extremely difficult in later life to separate them, even with the greatest effort. So difficult is it, that a soldier, whose arm or leg has been amputated, still speaks of feeling pain in those limbs, though they are now perhaps buried in the earth or the depths of the sea.

Although we are liable in these cases to be led into a mistake, if we do not guard against it with care, it is perhaps an obvious remark, that the foundation of this liability to errour is laid in our constitution for beneficent ends. It is not ordinarily so important in a practical point of view, that we should attend to the internal feeling, as

to the external part which is affected. An injury in the external senses, the muscles, or the limbs, if it be not attended to, soon affects other parts of the body and even life itself. Hence Providence has put us in the way to form this strong and almost unconquerable mental habit, in order to secure protection, where it seems to be most urgently and frequently needed.

§. 207. *Connection of our ideas of extension and time.*

If we examine carefully our notions of Time, we shall find here also a CASUAL ASSOCIATION of long continuance and of great strength. It is believed to be the fact, that Time, as it exists in the apprehensions of most persons, is regarded as something *extended*. It is not necessary to delay here, to undertake a definition of time, to show what it is in the abstract, or to give a history of the notion which we form of it. Taking it for granted, that every one knows what is meant when we use that term, we merely assert here, that for some cause or other it is exceedingly difficult to think of it, except in the light of a modification of EXTENSION. The correctness of this remark may not perhaps appear perfectly obvious at first; but the expressions, which we apply to intervals of duration, are an evidence of its truth.

We say *before* such a time or *after* such a time, the same as before or after any material object; we speak of a *long* or a *short* time with no more hesitation than of a long or short distance, of a long or short bridge, or railway, or any other object of extension. We utter ourselves precisely in the same way we should do, if we were certain of having detected some real analogy between the two, between length and shortness in material substances, and what are called length and shortness in time. But it is not too much to say, that there is no such analogy, no such similitude; nor is it worth while to anticipate, that we shall ever be able to detect such analogy or similitude, until we can in practice apply the measures of feet, ells, roods, &c. to hours, and days, and weeks. How then can it be accounted for, that we apply terms, nearly in the

same way, as if this were the case, and as if such measurements could be made?

The strong association of these ideas has most probably arisen in this manner, viz. from our constantly measuring one of these quantities by the other. It is the common method to measure time by motion, and motion is measured by extension. In an hour the hand of a clock moves over a certain space; in two hours over double the space, and so on.——No doubt it is convenient to apply the terms "long" and "short," "before" and "after," and others similar, to time. We could not well dispense with them. But it ought to be remembered, if we would have right notions of things, that the application of those expressions has arisen from the mode in which we measure time, and that time and extension are essentially distinct in their nature.

§. 208. *Of high and low notes in music.*

We speak of high and low in reference to notes in music, the same as of the high or low position of material bodies. There is supposed to be some analogy between the relation, which the notes in the scale of music bear to each other, and the relation of superiority and inferiority in the position of bodies of matter. But it is impossible to prove the existence of such analogy, however generally it may have been supposed; and the supposition itself of its existence has no doubt arisen from a casual association of ideas, which has acquired strength by lapse of time and by repetition.

A proof of this association of ideas being purely accidental is that an association, the very reverse of this, was once prevalent.—It is remarked in the preface to Gregory's edition to Euclid's works, that the more ancient Greek writers considered the grave sounds as high, and the acute ones as low. The present mode of speaking on the subject is of more recent origin; but at what time and in what way it was introduced cannot be asserted with confidence. In the preface just referred to, it is, however, observed, that the ancient Greek custom of looking upon

the grave sounds as high and the acute as low, precisely the reverse of what is now common, continued down until the time of Boethius. It has been conjectured with some ingenuity, that this connection or association of thought among the Greeks and Romans, for it was equally prevalent among both, might have been owing to the construction of their musical instruments. The string, which sounded the grave or what we call the low tone, it has been supposed, was placed highest, and that, which gave the shrill or acute, had the lowest place. If this conjecture could be ascertained to be well founded, it would strikingly show, from what very slight causes strong and permanent associations often arise. It is hardly necessary to observe, that it is important to examine the origin and progress of such associations, in order that we may correct those erroneous and illusive notions, which will be found to be built upon them.

§. 209. *Connection of the ideas of extension and colour.*

There is no necessary connection between colour, as the term is commonly employed by philosophers, and extension. The word COLOUR properly denotes a sensation in the mind; the word EXTENSION, the quality of an external material object. There is, therefore, no more natural connection, and no more analogy between the two, than there is between pain and solidity. And yet it so happens that we never have the sensation or idea of colour without at the same time associating extension with it; we find them, however different they may be in their nature, inseparable in our thoughts. This strong association is formed in consequence of our always perceiving extension at the very time, in which the sensation of colour is excited in the mind. The perception of the one, and the sensation of the other have been so long simultaneous, that we have been gradually drawn into the belief, that, on the one hand, all colour has extension, and on the other, all extension has colour. But what we call colour being merely a state of the mind, it is not possible, that it should with propriety be predicated of any external mate-

rial substances. Nor is it less evident, if colour be merely a sensation or state of the mind, that matter can exist, and does exist without it.

But what has been said will not satisfy all the queries, which may be started on this point, unless we remark also on the ambiguity in the word COLOUR. The view, which has been taken of the connection between colour and extension, is founded on the supposition, that colour denotes a sensation of the mind, and that merely. It seems to be supposed by some writers, that the word colour has two meanings, and that it is thus generally understood ;—(1) It denotes that disposition, or arrangement, or whatever it may be, in the particles of matter, which not only causes the rays of light to be reflected, but to be reflected in different ways ;—(2) It denotes that mental sensation, which follows, when the rays have reached the retina of the eye. When people use the term with this diversity of signification they can say with truth, that external bodies have colour, and also that colour is a sensation of the mind. It may be said also in the first sense of the term, which has been mentioned, that colour has extension, because particles of matter have extension. But it is not altogether evident, that people generally make this distinction, although some may. There is great reason to think, that they commonly mean by the term the *appearance* of colour or the sensation in the mind ; and they no doubt in general regard this appearance or sensation, as belonging to external objects, as being in some sense a part of those objects, and as having extension. How erroneous this supposition is, has already appeared!

§. 210. *Whether there be heat in fire, &c.*

The questions, Whether there be heat in fire, coldness in snow, sweetness in sugar, and the like, seem well suited to the inquisitive and nicely discriminating spirit of the Scholastic ages. Although well adapted to exercise the ingenuity of the Schools, they are far from being without some importance in the more practical philosophy of

later times. If these questions concern merely the matter of fact, if the inquiry be, What do people think on these points? It admits of different answers. But this is of less consequence to be known, than to know what is the true view of this subject.

The following, there is much reason to think, is the view, which should be taken. If by heat, cold, and taste in bodies, we merely mean, that there is this or that disposition or motion or attraction in the particles, then it must clearly be granted, that fire is hot, that snow is cold, and sugar is sweet. But if by heat is understood what one feels on the application of fire to the limbs, or if by sweetness is understood the sensation of taste, when a sapid body is applied to the tongue, &c. then fire has no heat, sugar no sweetness, and snow is not cold. These states of the mind can never be transformed into any thing material and external. The heat or the cold which I feel, and the different kinds of tastes are sensations in the soul and nothing else.

§. 211. *Whether there be meaning in words?*

We say in our common discourse, that there is meaning in words, that there is meaning in the printed page of an author; and the language is perhaps sufficiently correct for those occasions, on which it is ordinarily employed. We do not deem it necessary to object to the common mode of speaking in this particular instance, nor to undertake to propose any thing better. But there is here an association of ideas; similar, both in its nature and its effects, to that existing between extension and colour already remarked upon.

When objects external to us are presented to the sense of sight, there is immediately the sensation of some colour. This sensation we have been so long in the habit of referring to the external object, that we speak and act, as if the colour were truly in that object and not in ourselves; in the language of D'Alembert, as if the sensations were transported out of the mind and spread over the material substance. And it is not until we take some time to re-

flect, and until we institute a careful examination, that we become satisfied of our errour.

In the same way when we look upon the page of an author we say it has meaning, or that it is full of thought; whereas in truth, in consequence of a long continued and obstinate association, of which we are hardly sensible ourselves, we transport the meaning or thought out of ourselves and spread it upon that page. The thought or meaning is in ourselves, but is placed by us, through the means of a casual but very strong association, in the written marks which are before us. All the power, which the words have, results from convention, or, what is the same thing, exists in consequence of certain intellectual habits, formed in reference to those words. It is these habits, formed in reference to them, it is this mental correspondence, which gives these characters all their value; and without the mind, which answers to and which interprets them, they could be considered as nothing more than mere black strokes drawn upon white paper, and essentially differing in nothing from the zigzag and unmeaning delineations of a schoolboy on the sand. As all the beautiful variety of colours do not and cannot have an existence without the mind, which has sensations of them or perceives them, so words are useless, are unmeaning, are nothing without the interpretations of an intellect, that has been trained up so as to correspond to them. By association, therefore, we refer the meaning to the written characters or words, when in truth it is in the mind, and there alone.

§. 212. *Benefit of examining such connections of thought.*

It is of great importance to us to be able to separate ideas, which our situation and habits may have intimately combined together. To a person who has this power in a considerable degree, we readily give the credit of possessing a clear and discriminating judgment. And this mental characteristic is of great consequence not only in pursuing the study of intellectual philosophy, but in the conduct of life. It is in particular directly sub-

servient to the power of reasoning, since all processes of reasoning are made up of successive propositions, the comparison of which implies the exercise of judgment. The associations of thought, which have been mentioned in this chapter, are so intimate or rather almost indissoluble, that they try and discipline the mind in this respect,—they teach it to discriminate. They are worthy to be examined, therefore, and to be understood, not only for the immediate pleasure, which they afford in the discovery of our errours; but also because they have the effect of training up one's powers to some good purpose. Let a person be accustomed to making such discriminations as are implied in fully understanding the instances in this chapter, and he acquires a readiness, which is not easily outwitted; he trains himself to such a quickness of perception in finding out what truly belongs to an object and what does not, as will not allow him to be imposed upon by that confusion of ideas, which in so many cases distorts the judgments of the multitude.

§. 213. *Power of the will over mental associations.*

In view of what has been said in this and in former chapters, the inquiry naturally arises, What is the degree of influence, which we are able to exercise by mere will or volition over associated trains of thought? The answer to be given to this inquiry is, that we have no direct influence or power over them;—there is a constant train of ideas, but their succession, their coming and departing depends on causes beyond our immediate voluntary control. The truth of the general statement, that we cannot produce or call up an idea by a mere direct act of the will, and that, consequently, trains of ideas are not directly under its control, cannot but appear quite evident on a little reflection. We never can will the existence of any thing without knowing what it is which we will or choose. This requires no further proof than is contained in the proposition itself. Therefore, the expressions, to will to have a certain thought or train of thought,

clearly imply the present existence of that thought or train; and, consequently, there can be no such thing as calling up and directing our thoughts by immediate volition.

To this view of want of direct voluntary power over our associated ideas and to the argument in support of it, those mental efforts, which we term recollection or intentional memory, have been brought up as an answer. In cases of intentional memory it will be said, an object or event is remembered, or in other words, an idea or train of ideas is called up, by mere volition or choice. To this objection we make this reply. It is evident, before we attempt or make a formal effort to remember the particular circumstances of an event, that the event itself in general must have been the object of our attention. There is some particular thing in all cases of intentional remembrance, which we wish to call to mind, although we are totally unable to state what it is; but we know, that it is somehow connected with some general event, which we already have in memory. Now by revolving in mind the great facts or outlines of that event, it so happens, that the particular circumstance, which we were in search of, is called up. But certainly no one can say that this is done by a direct volition;—so far from it, that nothing more is wanting to explain it, than the common principles of association. This statement is illustrated, whenever, in reciting an extract which we had committed to memory, we are at a loss for the beginning of a particular sentence. In such a case we naturally repeat a number of times the concluding words of the preceding sentence, and very soon we recall the sentence, which was lost; not, however, by direct volition, but by association.

§. 214. *Associations controlled by an indirect voluntary power.*

But we would not be understood to say, that the will possesses no influence whatever over our trains of thought; its influence is very considerable, although it is

not as we have seen, immediate and direct.——(1) We have, in the first place, the power of checking or delaying the succession of ideas. This power is always found to exist, when the direction of the mind towards a particular subject is attended with a feeling of desire or interest. We are not, indeed, enabled by our power in this respect either directly to call up or to banish any one or any number of our thoughts. But the consequence is, a variety of trains of thought are suggested, which would not have been suggested, had it not been for the circumstance of the original train being delayed. Thus, in the course of our mental associations, the name of Sir Isaac Newton occurs;—we experience a strong emotion of interest; aided by this interest, we check the current of our thoughts at that name, and we feel and are conscious, that we have within us the ability to do so. While we delay upon it, a variety of series of ideas occurs. At one moment we think of eminent mathematicians and astronomers, for he himself was one; at another, we think of those cotemporaries, who were his particular friends, whatever their rank in science, because they lived at the same time; a moment after, our minds dwell upon some striking incidents in his life or some marked features in his social or intellectual character;—and again, we may be led to think, almost in the same instant, of some proposition or demonstration, which had once exercised his patience and skill. In consequence of delaying a few moments on the name or rather on the general idea of the man, these different trains of thought are presented; and we can evidently fix our minds upon one of these subjects if we choose, or have a desire to, and dismiss the others. This is one way, in which by choice or volition we are able to exercise a considerable indirect power over our associations.

(2) We acquire, in the second place, great power over our associations by HABIT; and as no man ordinarily forms such habit without choosing to form it, we have here another instance of the indirect power of volition. By the term Habit, when it is applied to our mental opera-

tions, we mean in particular that facility or readiness, which they acquire by being frequently repeated. The consequence of repetition or frequent practice is, that certain associations are soon very much strengthened, or that a facility in them is acquired.

Striking instances of the effect of repetition have been given in the course of this chapter, although it might perhaps be said in respect to these, that they were forced upon us by our particular situation, rather than brought about by positive desire or choice. But there are other instances, to which this remark is not equally applicable. ——It is a well known fact, that almost any person may become a punster or rhymer by taking the pains to form a habit, that is, by increasing the facility of certain associations by frequent repetition. By punning we understand the power of readily summoning up, on a particular occasion, a number of words different from each other in meaning, but resembling each other more or less in sound.——That facility of association, which is acquired by frequent repetition and which is commonly expressed by the word HABIT, (as when we say of a person that he has formed a habit of expression,) is the great secret of fluency in extemporaneous speaking. The extemporaneous speaker must, indeed, have ideas; no modification of association whatever can supply the place of them. But his ability to arrange them in some suitable order and to express them in words without previous care and effort, is the result, in a great measure, of habits of association flowing from his own choice and determination.—(See Stewart's Elements, Vol. I. CH. VI. PT. 2; Historical Dissertation, PT. I. §. II. CH. 2; Brown's Lectures, XLI, XLII, XLIX. &c.)

CHAPTER ELEVENTH.

COMPLEX NOTIONS OF EXTERNAL ORIGIN.

§. 215. *Of simplicity and complexness of mental states in general.*

BEFORE leaving that portion of our knowledge, which has an external origin, it is necessary to examine it in relation to the principle or law of Simplicity and Complexness, which was formerly considered. We find on examination, that our mental states do not possess the same value, but oftentimes one is virtually equal to many others; and hence we are able to resolve the whole mass of them into the two general classes of Simple and Complex. It may seem surprising, that one mental state, which has a perfect unity and simplicity in itself, should still embrace two, three, or any number of others; but such is undoubtedly the fact. Let us fix our attention upon whatever complex notion or feeling we please to, and we shall find it susceptible of being examined under this view ; we may consider it in its whole or in its parts, in its comprehension or its elements.

And it may be added here, that in a practical point of view, the ability to do this, and the habit of doing it are of much importance. In early life, and in all the stages of education, the practice of mental analysis, in its application to particular thoughts and feelings, should undoubt-

edly be kept up. It will in the end aid much in clearness of perception, and in the training up of a prompt and accurate judgment, if no word, expressive of a complex mental state, is permitted to be used without a proper understanding of what is involved in it.—Looking therefore at those sensations and notions, which the mind has access to through the direct medium of the senses, we find them either SIMPLE or COMPLEX. There is not a single feeling, not a single idea, which is not comprehended in this arrangement, and does not belong to one of these two classes.

§. 216. *Instances of simple ideas from the senses.*

It is proper, before looking at those notions which are complex, to refer to some of those which are simple; as even the brief consideration of the latter will help to throw light on the former.—Among the simple ideas, (*sensations* perhaps is here the more appropriate term,) which we become possessed of by means of the senses, are all the varieties of colour, as red, white, yellow, green, &c., received by the sense of sight. Under the head of simple notions are to be included also the original intimations of the touch, as resistance, extension, hardness, and softness, &c. The character of simplicity is to be ascribed in like manner to the original sensations of sound, received by the sense of hearing; and to those of the smell and the taste.

These elementary notions are conformed to the general view, which has been given in a former chapter of our uncompounded feelings, viz, They are not capable of a separation into parts and of being resolved into other elements, and as a consequence of this are not susceptible of being made clearer by definition. Nevertheless they are not obscure and mysterious, and can well do without any laboured exposition. They are just what nature made and designed them to be, distinct and definite, as a general statement, both in themselves, and to men's comprehension of them.

When we make this statement, with the limitation of its being true and applicable in general, we have reference to

those cases, where one sensation borders upon and runs into another, and where the human mind undoubtedly finds it apprehension of them somewhat indistinct. There are many simple sensations, answering to this description, to which we give no names; the prominent diversities only are marked in that way, to the neglect of those, which approximate, and partially mingle in with other diversities.

§. 217. *Of objects contemplated as wholes.*

But what we term our simple notions are representative only of the parts of objects. In point of fact, however, those external objects, which come under our notice, are presented to us as wholes, and as such, (whatever may have been the original process leading to that result,) we very early contemplate them.—Take for instance a LOADSTONE. In their ordinary and common thoughts upon it, men undoubtedly contemplate it as a whole; the state of mind, which has reference to it, embraces it as such. This complex notion, like all others which are complex, is virtually equal to a number of others of a more elementary character.

Hence, when we are called upon to give an account of the loadstone, we can return no other answer than by an enumeration of its elements. It is something, which has weight, colour, hardness, friability, power to draw iron, and whatever else we discover in it.

We use the term GOLD. This is a complex term, and implies a complexity in the corresponding mental state. But if we use the word gold, or any other synonymous word, in the hearing of a man who has neither seen that substance, nor had it explained to him, he will not understand what is meant to be conveyed. We must enter into an analysis; and show, that it is a combination of the qualities of yellowness, great weight, fusibility, ductility, &c. We look upward to the sun in the heavens. But what should we know of that great aggregate, if we could not contemplate it in the elements of form and extension, of brightness and heat, of roundness and regularity of motion? —All the ideas, therefore, which we form of external objects considered as wholes, are complex; and all such complex notions are composed of those which are simple.

§. 218. *Complex notions preceded by simple ones.*

It would seem from what has been thus far stated, that there is in the class of mental states now under consideration an internal or mental complexity, corresponding to the complexity in the external object. But it is not to be thought, that we arrive at this ultimate complexity of mental state by a single act, by an undivided and inseparable movement of the mind, although, such is the rapidity of the process, it may in some cases seem to be so. On the contrary, every simple idea, involved in, and forming a part of the compound, so far as we have any distinct conception of the compounded idea, passes under a rapid review, and the complex state of the mind is the result of this rapid review. We cannot, for instance, have the complex notion of a man, of iron, of loadstone, of a tree, &c. without having first, at some time, subjected each simple element, of which such objects are made up, to a separate examination.

This glance of the mind at the various simple notions is performed indeed with such extreme quickness, (at least generally so,) that the successive steps of it are not recollected ; but this, when we consider the rapidity of the mind's operations in other instances, is no sufficient objection to the statement, which has been made.

The process in the formation of complex ideas goes on from step to step, from one simple or elementary part to another, but when the examination is completed, the ultimate state of the mind, which the completion of the process implies, is not to be considered as in any degree wanting in unity or oneness. It is, in itself considered, as much one and indivisible as any one of those states of mind which we know to be simple.

§. 219. *Imperfections of our complex notions of external objects.*

Although the mind of man is to be regarded, in the great ordering and constitution of things, as in some important sense the representative of the material universe,

it must still be acknowledged to be a very imperfect one. It is as true in nature, as it is in religion, that we *know only in part*. Men have no doubt been always advancing in knowledge, but when we compare our present acquisitions with our former ignorance, we may well anticipate, that the progress of the future will lay the foundation of another comparison, not so flattering to the present generation. This view will not only apply to knowledge in the mass; but will hold good, on a smaller scale, of every complex notion which we form.——Take for instance the complex idea of Gold. The thought is understood to be the representative of the thing. But is it in this case a true one? If we should admit it to be so as far as it goes, still it is evidently not a full or perfect one; nor can we regard it as such without suffering ourselves to be led into errour. In the complicated notion, to which men agree in giving that name, we combine the simple idea of yellowness, weight, hardness, malleability, and perhaps others; but it is only reasonable to suppose, that no person combines, in his conception of it, all its properties.

Philosophy may boast of her achievements; but nature has not revealed all her secrets yet. Can any man explain the mode of the connection between mind and matter? That is a secret not yet cleared up. Can any man assert positively what that cohesion or attraction is, which holds together the parts of gold, iron, and other material bodies? That is a subject also, on which nature has reserved to herself something further to say. One body impinging upon another puts it in motion; and in our wisdom we give it a name; we call it motion by impulse. But can any man tell, what motion is? Still more can he point out, how motion passes from one body to another when the particles of those bodies come in contact, if indeed there can be any actual contact?——Such are the doubts, that press upon us, wherever we turn our eyes. But this is not said to discourage inquiry. The first step in laying a good and broad foundation is to be fully sensible of our ignorance, and of the mind's limits.

§. 220. *Of what are to be understood by chimerical ideas.*

Mr. Locke somewhere speaks of certain notions, which the mind is capable of framing and to which it ascribes an external and material existence, as CHIMERICAL, in opposition to those which are real. Although the consideration of the notions thus designated may be deemed more important in a practical, than a purely philosophical point of view, the subject is evidently deserving some attention.

When an idea is a real or well-founded one, it has something precisely corresponding to it in nature, at least so far as it is understood to be representative of any thing. But when the mind so brings together and combines its perceptions as to form something of which nature presents no corresponding reality, then such notion or feeling is spoken of as chimerical. If, for instance, a person were known to have an idea of a body, yellow, or of some other colour, malleable, fixed, possessing in a word all the qualities of iron or of gold with this difference only, of its being lighter than water, it would be what we term a chimerical idea. That is; it would have nothing corresponding to it in the nature of things.—And a similar remark will apply to a multitude of other instances, which are to be found every where in the religious mythology, and the early traditions of nations. There is the CENTAUR, a fabulous animal, partly man and partly horse; the DRAGON, an immense serpent, furnished with wings, and capable of making its way through the atmosphere by their aid; the HYPOGRIFF, an imaginary steed, having the power also of performing ærial journeys; saying nothing of magical swords, enchanted castles and islands, &c.

Such chimeras, framed in the days of ignorance, have been too numerous; and not unfrequently the belief in them has been fostered and transmitted in the riper ages of the human understanding. Happily for us, on whom, in the language of Scripture, the ends of the world have come, in the abundance and operation of real causes, we are not obliged to resort to imaginary ones. There are grand agencies at work in nature, of which the mind

of man in its childhood never conceived. There are not only causes enough, but their agency is sufficiently striking to gratify all our wonder, without violating the strictness of truth, or overstepping the bounds of reality.

§. 221. *Of the introduction of such notions in early life.*

The views of the last section are of some practical consequence in training up the young mind. If causes exist in the soul itself, which, under an unwise direction, will result in false or chimerical notions, we may find here a practical rule in Education. The mind in early life should be carefully trained up to the knowledge of things as they are; and not to an aquaintance with mere suppositions, or with things as they are not. While the young mind by the mere aid of that instrumentality, which the author of nature has furnished, is constantly storing up important thoughts, it also receives false ideas from various sources. These erroneous intimations are not necessarily to be attributed to the imperfection of the senses, or to any thing originally in the constitution. There is no lack of sources of errour, without casting such imputations on the original tendencies of the mind. While nature at a very early period is rapidly carrying on the process of mental developement and instruction, too frequently her suggestions, instead of being aided, are counteracted or misrepresented by parents or domestics.

In support of this remark, it is merely requisite to refer to the numerous false notions, which children are led to entertain in respect to the existence of ghosts and other imaginary beings. It cannot be pretended, that such notions are the result of the mental powers in their legitimate exercise; on the contrary they are engrafted upon them by an extraneous and evil agency, which thus, either thoughtlessly or maliciously, perverts the commendable fears, and hopes, and devotional impulses of the soul. It is true undoubtedly, that many systems of superstition, many mythological codes of the most venerable antiquity, and with them their thousand chimeras, have passed

away. But all is not yet gone; spectres and aerial visitants, and enchantments still haunt the nursery. But there is certainly no want of true and important notions, which can be made an excuse for the introduction of such absurd and unfounded ones; and it ought to be made a great object to keep the mind as free from them as possible.

The greater heed is to be given to this direction, because permanently evil consequences are found to result from the neglect of it. We have the experience and testimony of many judicious persons, that the introduction of ideas of ghosts, &c. in early life ever afterwards renders one incapable of enduring darkness or solitude without great disquietude.

CHAPTER TWELFTH.

ABSTRACTION.

§. 222. *Abstraction implied in the analysis of our complex notions.*

THE remarks, which have been made, in the course of the foregoing chapter, on the analysis and examination of our Complex Intellectual states, naturally lead to the consideration of another subject in some respects intimately connected with that topic. When we have once formed a complex notion, (no matter at what period, in what way, or of what kind,) it often happens that we wish, for reasons already given, to examine more particularly some of its parts. Very frequently this is absolutely necessary to the full understanding of it. Although undoubtedly its elementary parts once came under review, that time is now long past; it has become important to institute a new inspection, to take each simple notion involved in it, and examine it by itself. And this is done by means of the process of ABSTRACTION, and in no other way.

By the aid of that process, our complex notions, however comprehensive they may be, are susceptible, if one may be allowed so to speak, of being taken to pieces, and the elementary parts may be abstracted or separated from each other; that is, they are made subjects of consideration apart from other ideas, with which they are ordinarily found to be associated. And hence, whenever this is

the case in respect to the states of the mind, they are sometimes called ABSTRACTIONS, and still more frequently are known by the name of ABSTRACT IDEAS.

For the purpose of distinctness in what we have to say, they may be divided into the two classes of Particular and General; that is to say, in some cases the abstraction relates only to a single idea or element, in others it includes more.——General Abstract Ideas, (or the notions which we form of Genera and Species.) will form a distinct subject of consideration.

§. 223. *Instances of particular abstract ideas.*

We shall proceed, therefore, to remark here on Particular abstractions. Of this class the notions, which we form of the different kinds of colours, may be regarded as instances. For example we hold in our hand a rose; it has extension, colour, form, fragrance. The mind is so deeply occupied with the colour, as almost wholly to neglect the other qualities. This is a species of abstraction, although perhaps an imperfect one, because when an object is before us, it is difficult, in our most attentive consideration of any particular quality or property, to withdraw the mind wholly from the others. When, on the contrary, any *absent* object of perception occurs to us, when we think of or form a conception of it, our thoughts will readily fix upon the colour of such object, and make that the subject of consideration, without particularly regarding its other qualities, such as weight, hardness, taste, form, &c. We may also distinguish in any body, (either when present or still more perfectly when absent,) its solidity from its extension, or we may direct our attention to its weight, or its length, or breadth, or thickness, and make any one of these a distinct object in our thoughts.

And hence, as it is a well known fact, that the properties of any body may be separated in the view and examination of the mind, however closely they may be connected in their appropriate subjects, we may lay down this statement in respect to the states of mind before us; viz. When any quality or attribute of an object, which does

not exist by itself, but in a state of combination, is detached by our minds from its customary associates, and is considered separately, the notion we form of it becomes a particular abstract idea.——The distinctive mark of this class is, that the abstraction is limited to one quality. It should perhaps be particularly added, that the abstraction or separation may exist mentally, when it cannot take place in the object itself. For instance, the size, the figure, length, breadth, colour, &c. of a building may each of them be made subjects of separate mental consideration, although there can be no real or actual separation of these things in the building itself. If there be any one of these properties, there must necessarily be all.

§. 224. *Mental process in separating or abstracting them.*

The manner of expressing ourselves on the subject of our abstract notions, to which we have been accustomed, is apt to create and cherish a belief in the existence of a separate mental faculty, adapted solely to this particular purpose. But the doctrine of a power or faculty of abstraction, which is exclusive of other mental susceptibilities, and is employed solely for this purpose, does not appear to be well founded. It will convey an impression nearer the truth to speak of the PROCESS, rather than the power of abstraction.——The following statement will be sufficient to show, how those of the first class, or particular abstract ideas are formed.

Although our earliest notions, whether they arise from the senses or are of an internal origin, are simple, existing in an independent and separate state, yet those simple thoughts are very soon found to unite together with a considerable degree of permanency, and out of them are formed complex states of mind. Many are in this way combined together in one, and the question is, how this combination is to be loosened, and the elementary parts are to be extracted from their present complexity?

In answer it may be said, that, in every case of separating a particular abstract idea, there must necessarily be a co-existent feeling of interest, choice, or desire. With-

out such feeling it is evident there can be no abstraction. This feeling must concern the previous complex state of the mind when viewed in one respect, rather than another; or what is the same thing, it will concern one part of the complex idea rather than another. So that we may truly and justly be said to have a desire to consider or examine some part of the complex idea more particularly, than the others. When the mind is in this high degree directed to any particular part of a complex notion we find it to be the fact, that the principle of association, or whatever unknown principle it is, which keeps the other parts in their state of virtual union with it, ceases in a corresponding degree to operate and to maintain that union; the other parts rapidly fall off and disappear, and the particular quality, towards which the mind was especially directed, remains the sole subject of consideration. That is to say, it is abstracted or becomes an abstract idea.—If for example we have in mind the complex notion of an object, a house, tree, plant, flower, and the like, but have a desire or interest in reference to the colour, mingling in with this complex notion, the consequence is, that the quality of colour will soon occupy our whole regard, and the other qualities will disappear, and no more be thought of. If we desire to examine the weight or extension of an object, the result will be the same; in other words, the extension, weight, colour, &c. will be abstracted.

This, in the formation of particular abstract ideas, seems to be the process of the mind and nothing more; viz. The co-existence of a feeling of desire or choice in respect to some particular part of any complex notion, and the consequent detention of the part, towards which an interest is felt, and the disappearance of the other parts. ——Such is the activity of the mind, and in so many ways it views the "images of things," that this striking process of detaching, and examining, and changing the parts of our complex notions, is almost constantly going on. And after the mind has thus shifted its position, and has been now in this state, and now in that, as if playfully to show its wonderful readiness in diminishing itself to a

part of its previous complexity, it seems as readily to swell back again, if we may be allowed in such figurative expressions, to its former dimensions, and often exists the same as before the process of abstraction commenced.

§. 225. *Of generalizations of particular abstract ideas.*

The terms GENERALIZING and GENERALIZATION are often found applied to the states of mind under consideration. When we have made any quality of a body a distinct and separate subject of attention, we may further regard it as belonging to one or more objects, according as we find such to be the fact or otherwise. What is chiefly meant therefore, when we speak of the generalizing of this class of abstract notions, is that, in our experience of things, we observe them to be common to many subjects. We find whiteness to be a quality of snow, of chalk, of milk, and of other bodies; and whenever with the simple abstract notion of whiteness we connect in our thoughts the additional circumstance of its not being limited to one body but the property of many, the term may be said to be generalized. And this seems to be all, that can be properly understood by generalization, when applied to the states of mind now before us.

§. 226. *Of the importance and uses of abstraction.*

The power of Abstraction, as it has sometimes been called, is by no means an unimportant one, even when limited to the separation of the particular or simple elements of thought.——"A carpenter, (says Kames,* speaking of the great utility of abstraction,) considers a log of wood with regard to hardness, firmness, colour, and texture; a philosopher, neglecting these properties, makes the log undergo a chemical analysis, and examines its taste, its smell, and component principles; the geometrician confines his reasoning to the figure, the length, breadth, and thickness; in general, every artist, abstracting from all other properties, confines his observations to those,

* Elements of Criticism, Vol. III. Appendix.

which have a more immediate connection with his profession."

Besides its well-known uses in the various forms of reasoning, (particularly demonstrative reasoning,) abstraction is greatly subservient to the exertions of a creative imagination, as they appear in painting, architecture, poetry, and the other fine and liberal arts.

The poet and the painter are supplied with their materials from experience; without having received ideas from some source they never could have practised their art. But if they do not restrict themselves to mere imitation, they must combine and modify the ideas which they have, so as to be able to form new creations of their own. But every such exertion of their powers presupposes the exercise of abstraction in decomposing and separating actual conceptions, and in forming them anew.

From how many delightful forms in nature, and how many ideal temples contemplated for a long time in the mind's eye, must the genius, that planned the famous Parthenon, have abstracted every form of beauty, and excellence of proportion! From how many forests of harmony both seen and imagined, and fields of bloom, and rivers and waterfalls, must the mind, that conceived the Garden of Paradise Lost, have drawn each sound, that is enchanting to the ear, and colour, that is pleasant to the sight!

CHAPTER THIRTEENTH.

GENERAL ABSTRACT IDEAS.

§. 227. *General abstract notions the same with genera and species.*

We proceed, in connection with the remarks of the last chapter, to the consideration of GENERAL ABSTRACT ideas; a subject of no little interest, and which has frequently been thought to be attended with no small difficulty.

General Abstract notions are not only different, in consequence of embracing a greater number of elementary parts, from those which are particular, but are also susceptible of being distinguished from the great body of our other complex notions.——The idea for example, which we form of any individual, of John, Peter, or James, is evidently a complex one, but it is not necessarily a general one. The notion, which we frame of a particular horse, or of a particular tree is likewise a complex idea, but not a general one. There will be found to be a clear distinction between them, although it may not be perfectly obvious at first. GENERAL ABSTRACT IDEAS are our notions of the classes of objects, that is, of Genera and Species. They are expressed by general names, without, in most cases, any defining or limitation, as when we use the words ANIMAL, MAN, HORSE, BIRD, SHEEP, FISH, TREE, not to express any one in particular of these various classes, but animals, men, horses, &c. in general.

§. 228. *Process in classification or the forming of genera and species.*

Now if our general abstract ideas, so far as they relate to external objects, are truly notions of SPECIES and GENERA, it will aid us in the better understanding of them, if we briefly consider, how species and genera are formed. Men certainly find no great practical difficulty in making these classifications, for we find that they are made in numberless instances, and at a very early period of life. They are evidently governed in the process by definite and uniform mental tendencies; and though they sometimes make mistakes, such mistakes are neither frequent nor permanent, and besides are generally owing to partial and incidental causes.

What then is the process in classification?—It is obvious, in the first place, that no classification can be made without considering two or more objects together. A number of objects, therefore, are first presented to us for our observation and inquiry, which are to be examined first in themselves, and then in comparison with each other. We will take a familiar scene to illustrate what takes place.

We suppose ourselves to stand on the bank of a navigagable river; we behold the flowing of its waters, the cliffs that overhang it, the trees that line its shore, the boats and boatmen on its bosom, the flocks and herds, that press down to drink from its waves. With such a scene before us, it is to be expected, that the mind will rapidly make each, and all of these the subjects of its contemplation; nor does it pursue this contemplation and inquiry far, without perceiving certain relations of agreement or difference. Certain objects before it are felt to be essentially alike, and others to be essentially different; and hence they are not all arranged in one class, but a discrimination is made, and different classes are formed. The flocks and herds are formed into their respective classes. The tall and leafy bodies on the river's bank, although they differ from each other in some respects, are yet found to agree

in so many others, that they are arranged together in another class, and called by the general name of TREE. The living, moving, and reasoning beings, that propel the boats on its waters, form another class, and are called MAN.

And there is the same process, and the same result in respect to all other bodies coming within the range of our observation.

§. 229. *Early classifications sometimes incorrect.*

It has been stated, that, in making these classifications, men are governed by definite and unifom mental tendencies; still it must be acknowledged, that mistakes are sometimes committed, especially in the early periods of society, and in all cases where the opportunities of examination and comparison are imperfect. When man first opens his eye on nature, (and in the infancy of our race, he finds himself a novice, wherever he goes,) objects so numerous, so various in kind, so novel and interesting, crowd upon his attention; that, attempting to direct himself to all at the same time, he looses sight of their specifical differences, and blends them together, more than a calm and accurate examination would justify. And hence it is not to be wondered at, that our earliest classifications, the primitive genera and species, are sometimes incorrectly made.

Subsequently, when knowledge has been in some measure amassed, and reasoning and observation have been brought to a greater maturity, these errours are attended to; individuals are rejected from species, where they do not properly belong, and species from genera. The most savage and ignorant tribes will in due season correct their mistakes, and be led into the truth.

§. 230. *Illustrations of our first classifications from the Savages of Wateeoo.*

We are naturally led to introduce an incident here, which throws some light on this part of our subject. The English navigator, Cook, in going from New Zealand to the Friendly Islands, lighted on an Island, called Wateeoo.——"The inhabitants (he says) were afraid to

come near our cows and horses, nor did they form the least conception of their nature. But the sheep and goats did not surpass the limits of their ideas, for they gave us to understand, they knew them to be *birds*."

Captain Cook informs us, that these people were acquainted with only three sorts of animals, viz. dogs, hogs, and birds.—Having never before seen any such animals as a cow or a horse, they beheld their great size and formidable aspect with admiration; filled with fear, they could not be induced to approach, and knew not what to call or think of them. They noticed the goats and the sheep, and clearly saw, that they were different from the dogs and hogs, with which they had been acquainted. But how did it happen, that they called them birds?

There is no nation so rude and uncivilized, as not to have formed a few classifications, and not to possess a few general terms. Having noticed a variety of birds in their waters and forests, the people of Wateeoo had undoubtedly found it necessary before this period to assign some general name or appellative to the flying animal, expressive of those resemblances, which evidently pervade the whole class. They called them, we will suppose, BIRDS. Knowing there was a great variety of them, and that they were of different sizes, they not unnaturally applied the same term to the sheep and goats of the English. They knew not but there might be some new class of birds, which they had not hitherto noticed; and they saw no insuperable objection, in the size of the sheep and goats, to this disposition of them, whatever other objection they might subsequently have found.

But they could clearly have no thoughts of this kind in respect to cows and horses; and as to hogs and dogs they had no generic term for them, having never known more than one variety or class, and having never been led to suspect, that there was or could be any other.

§. 231. *Of the nature of general abstract ideas.*

The notions, which are thus formed in all cases of classification, are commonly known, in the Treatises hav-

ing relation to these subjects, as General Abstract ideas. And they are no less numerous than the multiplied varieties of objects, which are found to exist every where around us. It is thus, that we form the general notions of animal and of all the subordinate species of animals; of tree and its numerous varieties; of earths, and minerals, and whatever else is capable of being arranged into classes.

We may apply these views not only to natural objects, but to forms and relations of a very different character. The word Triangle is the name of a general abstract idea. Great exceptions however have been taken to certain incautious expressions of Mr. Locke on this point. He asserts, that it requires some pains and skill to form the general idea of a triangle, and gives the following reason; "for it must be neither oblique, nor rectangle, neither equilateral, equicrural, nor scalenon, but all and none of these at once," &c. This language is undoubtedly open to criticism, and in truth has not failed to receive a full share. The correct view seems to be this. The word TRIANGLE is not only the name of a class, but of a very general class; it is the name of a Genus, embracing all those figures, which agree in the circumstance of being bounded by three straight lines meeting one another so as to form three angles. A figure having any other form, (in other words not exhibiting a resemblance or similarity in this respect,) is excluded from the Genus; but it is still so extensive, taken in the sense just now mentioned, as to include all figures whatever of that name.——Now there are embraced within the genus, as in numerous other cases, subordinate classes, which are distinguished by their appropriate names, viz, the class of acute-angled triangles, that of right-angled triangles, of obtuse-angled triangles, &c.

But it is to be noticed, that the general idea, whatever objects it may be founded upon, does not embrace every particular, which makes a part of such objects. When we look at a number of men, we find them all differing in some respects, in height, size, colour, tone of the voice, and in other particulars. The mind fixes only up-

on those traits or properties, with which it can combine the notion of resemblance; that is to say, those traits, qualities, or properties, in which the individuals are perceived to be like, or to resemble each other.——The complex mental state, which embraces these qualities and properties, and nothing more, (with the exception of the superadded notion of other bodies having resembling qualities,) is a General Abstract idea.

And hence the name. Such notions are called ABSTRACT, because, while embracing many individuals in certain respects, they detach and leave out altogether a variety of particulars, in which those individuals disagree. If there were not this discrimination and leaving out of certain parts, we never could consider these notions, regarded as wholes, as otherwise than individual or particular.—They are called GENERAL, because, in consequence of the discrimination and selection which has just been mentioned, they embrace such qualities and properties as exist not in one merely, but in many.

The difference, therefore, between the complex notion, which we form of any particular object, and the general complex feeling now under consideration is truly this; the latter combines together fewer particulars, but unites with such, as it does combine together, the additional notion of resemblance, which implies as its basis the comparison of a number of objects, and is perhaps the distinguishing circumstance.——Hence it must be allowed, that there is no outward object precisely corresponding to the GENERAL NOTION, which we form. The mind takes into view only a division or part of any one object, combining with this select view the notion of other objects, and the relation of resemblance, in respect to such division or part.

If it should be asked, By virtue of what principle is this discovery of a resembling relation made? The answer is, (and it is the only one, which can be given,) that there is in the mind an original tendency or susceptibility, by means of which, whenever we perceive different objects together, we are instantly, without the intervention of any

other mental process, sensible of their relation in certain respects.

§. 232. *Objection sometimes made to the existence of general notions.*

It should not, however, be objected, as is sometimes done, that we can have no such general notion at all, because there is nothing outward, which it precisely corresponds to. Such an objection, although it appears to have been frequently made, goes too far; it would seem even to lead to the conclusion, that we can have no complex idea of any kind, neither particular nor general. It cannot be pretended, that even our notions of particular objects correspond precisely to those objects; the ideas, which we form of a particular house, tree, or plant, or any other individual object, are often erroneous in some respects, and probably always imperfect. But they are not, for that reason, to be regarded as false and chimerical, and to be rejected as having no foundation in nature.

We will suppose ourselves to have been acquainted in former years with a particular elm; we have looked upon it a thousand times; and it is familiar to us as any of our most cherished remembrances. At this great distance of time and place we form an idea, a conception, a notion of it, but it cannot be presumed to be a perfect or complete one. It cannot be pretended, that we have a notion not only of the trunk, but of every leaf and of the form of every leaf, of every branch and its intertwinings with every other branch; that it exists in our minds precisely, and in every respect, the same as it exists on the spot, where it grows. If therefore general abstract ideas are to be rejected, because they embrace only parts of those objects, which are ranked under them, we must on the same grounds reject and deny also our complex notions of individual objects; but this probably no one is prepared to do.

Take another obvious illustration in reproof of the objection, that, because general abstract ideas are purely mental, and have no outward and corresponding reality, they therefore do not exist.—We have an idea of God. We

presume to say, that it will be readily admitted, that we have such a notion; not many men are without it, even among the most degraded Savages. But evidently the same objection might be raised against the existence of any such idea, as has been raised against the existence of general abstractions. If general abstract ideas are not outwardly represented, so that of the Supreme Being, which is particular though complex, is also not outwardly represented; it is impossible, that it should be so. There is nothing we behold in heaven, or on earth, or under the earth, that is like Him. If every object in the universe were transformed into so many letters of light, to set forth his attributes and glory, they could not do it. Still we have the idea of God; and it has as real an existence as the mind has itself.

§. 233. *Of the power of general abstraction in connection with numbers, &c.*

The ability, which the mind possesses of forming general abstract ideas, is of much practical importance; but whether it be the characteristical attribute of a rational nature or not, as some have supposed, it is not necessary now to inquire. It is not easy to estimate the increase of power, which is thus given to the action of the human mind, particularly in reasoning. By means of general abstract propositions, we are able to state volumes in a few sentences; that is to say, the truths, stated and illustrated in a few general propositions, would fill volumes in their particular applications. But it is enough here to refer to a single circumstance in illustration of the uses of this power.

Without the ability of forming general notions, we should not be able to *number*, even in the smallest degree. Before we can consider objects as forming a multitude, or are able to number them, it seems necessary to be able to apply to them a common name. This we cannot do, until we have reduced them to a genus; and the formation of a genus implies the power, (or process rather,) of abstraction. Consequently, we should be unable without such power to number.—How great then is the practical importance

of that intellectual process, by which general abstractions are formed!—Without the ability to number, we should be at loss in all investigations where this ability is required; without the power to classify, all our speculations must be be limited to particulars, and we should be capable of no general reasoning.

§. 234. *Of general abstract truths or principles.*

There are not only general abstract ideas, but abstract truths or principles also of a general nature, which are deserving of some attention, especially in a practical point of view. Although enough has perhaps already been said to show the importance of abstraction, it may yet be desirable to have a more full view of its applications.

The process, in forming general truths or principles of an abstract nature, seems to be this. We must begin undoubtedly with the examination and study of particulars; with individual objects and characters, and with insulated events. We subsequently confirm the truth of whatever has been ascertained in such inquiry, by an observation of other like bodies and events. We proceed from one individual to another, till no doubt remains.

Having in this way arrived at some general fact or principle, we thenceforward throw aside the consideration of the particular objects on which it is founded, and make it alone, exclusively and abstractly, the subject of our mental contemplations. We repeat this process again and again, till the mind, instead of being wholly taken up with a multitude of particulars, is stored with truths of a general kind. These truths it subsequently combines in trains of reasoning, compares together and deduces from them others of still wider application. And the number of such general truths is the greater, because, in ascertaining them we are not restricted to our own personal experience in respect to the individuals coming under examination, but may often safely avail ourselves of that of others.

§. 235. *Of the speculations of philosophers and others.*

What has been said leads us to observe, that there is a

characteristical difference between the speculations of men of philosophic minds and those of the common mass of people, which is worthy of some notice. The difference between the two is not so much, that philosophers are accustomed to carry on processes of reasoning to a greater extent, as this, that they are more in the habit of employing general abstract ideas and general terms, and that, consequently, the conclusions which they form are more comprehensive. Nor are their general reasonings, although the conclusions at which they arrive seem in their particular applications to indicate wonderful fertility of invention, so difficult in the performance as is apt to be supposed. They have so often and so long looked at general ideas and general propositions, have been so accustomed, as one may say, to contemplate the general nature of things, divested of all superfluous and all specific circumstances, that they have formed a *habit*; and the operation is performed without difficulty. It requires in such persons no greater intellectual effort, than would be necessary in skilfully managing the details of ordinary business.

The speculations of the great bulk of mankind differ from those of philosophers in being, both in the subjects of them and in their results, particular. They discover an inability to enlarge their view to universal propositions, which embrace a great number of individuals. They may possess the power of mere argument, of comparing propositions together which concern particulars, and deducing inferences from them to a great degree; but when they attempt to contemplate general propositions, their minds are perplexed, and the conclusions, which are drawn from them, appear obscure, however clearly the previous process of reasoning may have been expressed. And this restrictedness and particularity of intellectual action may be even superinduced on minds, that were originally not wanting in breadth of survey, or had at least the advantages of education.

CHAPTER FOURTEENTH.

OF ATTENTION.

§. 236. *Of the general nature of attention.*

WITHOUT considering it necessary to speak of attention as a separate intellectual power or faculty, as some may be inclined to do, it seems to be sufficient to say, that ATTENTION expresses the state of the mind, when it is steadily directed, for a length of time, to some object of sense or intellect, exclusive of other objects. When we say, that any external object, or any subject of thought, which is purely internal, receives attention, it seems to be the fact, as far as we are able to determine, that the mind is occupied with the subject of its attention, whatever it is, for a certain period, and that all other things are for the time being, shut out. In other words, the grasp, which the mind fixes upon the object of its comtemplations, is an undivided, an unbroken one.

But it is natural to inquire, How this differs from the direction of the mind to a subject in any other case? Since in all instances, the mind, for the time being, is in one state merely; it always embraces one subject or part of a subject, exclusive of others.——The answer to be given to this inquiry is, that in ATTENTION the direction of the mind to a particular subject, or, (what is the same thing,) its continuance in a particular state or series of states, is accompanied with a feeling of preference, desire, or interest;

which feeling of desire is the cause of that continuance. So that in all cases of attention, the act of the mind is a complex one, involving two things, (1) The mere thought or series of thoughts, (2) The accompanying emotion of interest, which prevents that continual change in the thought, which would otherwise happen.

§. 237. *Of different degrees of attention.*

In agreement with this view of the subject, we often speak of attention great or small, as existing in a very high or a very slight degree. When the view of the mind is only momentary, and is unaccompanied, as it generally is at such times, with any force of emotion; then the attention is said to be slight. When it bends itself upon a thought or series of thoughts with earnestness, and for a considerable length of time, and refuses to attend to any thing else; then the attention is said to be intense.

We commonly judge at first of the degree of attention to a subject from the length of time, during which the mind is occupied with it. But when we look a little further, it will be found, that the time will generally depend upon the strength and permanency of the attendant emotion of interest. And hence both the time and the degree of feeling are to be regarded in our estimate of the power of attention in any particular case; the former being the result, and, in some sense, a measure of the latter.

Of instances of people, who are able to give but slight attention to any subject of thought, who cannot bring their minds to it with steadiness and power, we every where find multitudes; and there are some instances where this ability has been possessed in such a high degree as to be worthy of notice. There have been mathematicians, who could investigate the most complicated problems amid every variety and character of disturbance. It was said of Julius Caesar, that, while writing a despatch, he could at the same time dictate four others to his secretaries, and if he did not write himself, could dictate seven letters at once. The same thing is asserted also of the emperor Napoleon, who had a wonderful capability of di-

recting his whole mental energy to whatever came before him.*

The chess-player Philidor could direct three games of chess at the same time, of one of which only he required ocular inspection, the moves of the other two being announced to him by an assistant. The moves of the chessmen formed the subject, about which his thoughts were employed, and such was the intensity of interest, that the mind found no difficulty in dwelling upon it to the exclusion of other subjects, and for a considerable length of time.

§. 238. *Dependence of memory on attention.*

There seems to be no fact in mental philosophy more clearly established than this, that memory depends on attention; that is, where attention is very slight, remembrance is weak, and where attention is intense, remembrance continues longer. The following statement of Mr. Hobbes, in his political treatise of the Leviathan, will tend to illustrate this fact.——He says, he was once in company, where the conversation turned on the English civil war. A person abruptly asked, in the course of the conversation, What was the value of a Roman denarius? Such a question, so remote from the general direction of the conversation, had the appearance not only of great abruptness, but of impertinence. Mr. Hobbes says, that, on a little reflection, he was able to trace the train of thought, which suggested the question. The original subject of discourse naturally introduced the history of king Charles; the king naturally suggested the treachery of those, who surrendered him up to his enemies; the treachery of these persons readily introduced to the mind the treachery of Judas Iscariot; the conduct of Judas was associated with the thirty pieces of silver, and as the Romans occupied Judea at the time of the crucifixion of the Saviour, the pieces of silver were associated with the Roman denarii. All these trains of thought passed through the mind of the person, who asked the question, in a

* Segur's History of the Expedition to Russia, Bk. VII, ch. 13.

twinkling; and with good reason Mr. Stewart, in remarking on this anecdote, thinks it not improbable, that he would himself have been unable readily to state the train of ideas, which led to the unexpected inquiry.——Every one is able to detect analogous facts in his own mental experiences. We unexpectedly find ourselves reflecting on a subject, to which we must have been conducted by a long concatenation of thought. But the preceding series, which conducted to the present subject of our meditations, occupied our attention for so short a time, that no foundation was laid for the memory, and it has irretrievably vanished.

§. 239. *Further illustrations of the dependence of memory on attention.*

There are other facts perhaps of a still more obvious and satisfactory nature, which confirm the principle under consideration. In the course of a single day persons, who are in the habit of winking, will close their eyelids perhaps thousands of times, and as often as they close them will place themselves in utter darkness. Probably, they are conscious at the time both of closing their eyelids and of being in the dark, but as their attention is chiefly taken up with other things, they have entirely forgotten it.

(2) Let a person be much engaged in conversation, or occupied with any very interesting speculation, and the clock will strike in the room where he is, apparently without his having any knowledge of it. He hears the clock strike as much as at any other time, but, not attending to the perception of sound and having his thoughts directed another way, he immediately forgets.

(3) In the occupations of the day, when toils, and tumults, and cares are pressing us on every side, a thousand things escape our notice; they appear to be neither seen nor heard, nor to affect us in any way whatever. But at the stillness of evening, when toils are quieted, and there is a general pause in nature, we seem to be endued with a new sense, and the slightest sound attracts our attention. Shakspeare has marked even this.

"The crow doth sing as sweetly as the lark
"When neither is attended; and, I think,
"The nightingale, if she should sing by day,
"When every goose is cackling, would be thought
"No better a musician than the wren."

It is on the same principle, that people, dwelling in the vicinity of waterfalls, do not appear to notice the sound. The residents in the neighbourhood even of the great Cataract of Niagara are not seriously disturbed by it, although it is an unbroken, interminable thunder to all others.——The reason in all these cases is the same, as has already been given. There is no attention, and no remembrance, and of course virtually no perception.

(4) Whenever we read a book, we do not observe the words merely as a whole, but every letter of which they are made up, and even the minute parts of these letters. But it is merely a glance; it does not for any length of time occupy our attention; we immediately forget, and with great difficulty persuade ourselves, that we have truly perceived the letters of the word. The fact, that every letter is in ordinary cases observed by us, may be proved by leaving out a letter of the word, or by substituting others of a similar form. We readily in reading detect such omissions or substitutions.

(5) An expert accountant can sum up, almost with a single glance of the eye, a long column of figures. The operation is performed almost instantaneously, and yet he ascertains the sum of the whole with unerring certainty. It is impossible, that he should learn the sum without noticing every figure in the whole column, and without allowing each its proper worth; but the attention to them was so very slight, that he is unable to remember this distinct notice.

Many facts of this kind evidently show, as we think, that memory depends upon attention or rather upon a continuance of attention, and varies with that continuance.

§. 240. *Of exercising attention in reading, &c.*

If attention, as we have seen, be requisite to memory,

then we are furnished with a practical rule of considerable importance. The rule is, Not to give a hasty and careless reading of authors, but to read them with a suitable degree of deliberation and thought.—It is the fault of some persons, that they are too quickly weary, that they skip from one author to another, and from one sort of knowledge to another. It is true, there are many things to be known; we would not have a person limit himself entirely to one science, but it is highly important, that he should guard against that rapid and careless transition from subject to subject, which has been mentioned.

If we be asked the reason of this direction, we find a good and satisfactory one in the fact referred to at the head of this section, that there cannot be memory without attention, or rather that the power of memory will vary with the degree of attention. By yielding to the desire of becoming acquainted with a greater variety of departments of knowledge, than the understanding is able to master, and, as a necessary consequence, by bestowing upon each of them only a very slight attention, we remain essentially ignorant of the whole.

The person, who pursues such a course, finds himself unable to recal what he has been over; he has a great many half-formed notions floating in his mind, but these are so ill shaped and so little under his control as to be but little better than actual ignorance. This is one evil result of reading authors and of going over sciences in the careless way which has been specified, that the knowledge thus acquired, if it can be called knowledge, is of very little practical benefit, in consequence of being so poorly digested, and so little under control.

But there is another and perhaps more serious evil. This practice greatly disqualifies one for all intellectual pursuits. To store the mind with new ideas is only a part of education. It is at least a matter of equal importance, to impart to all the mental powers a suitable discipline, to exercise those that are strong, to strengthen those that are weak, and to maintain among all of them a suitable balance. An attentive and thorough examination of subjects

is a training up of the mind in both these respects. It furnishes it with that species of knowledge, which is most valuable, because it is not mixed up with errours; and moreover, gives a strength and consistency to the whole structure of the intellect. Whereas, when the mind is long left at liberty to wander from object to object, without being called to account and subjected to the rules of salutary discipline, it entirely loses at last the ability to dwell upon the subjects of its thoughts, and to examine them. And when this power is once lost, there is but little ground to expect any solid attainments.

§. 241. *Alleged inability to command the attention.*

We are aware that those, who are required to follow the directions above given as to a close and thorough examination of subjects, will sometimes complain, that they find a great obstacle in their inability to fix their attention. They are not wanting in ability to comprehend, but find it difficult to retain the mind in one position so long, as to enable them to connect together all the parts of a subject, and duly estimate their various bearings. When this intellectual defect exists, it becomes a new reason for that thorough examination of subjects, which has been above recommended. It has probably been caused by a neglect of such strictness of examination, and by a too rapid and careless transition from one subject to another.

Attention, it will be recollected, expresses the state of the mind, when it is steadily directed for some time, whether longer or shorter, to some object of sense or intellect, exclusive of other objects. All other objects are shut out; and when this exclusion of every thing else continues for some time, the attention is said to be intense.

Now it is well known, that such an exclusive direction of the mind cannot exist for any long period, without being accompanied with a feeling of desire or interest. In the greatest intellectual exertions, not the mere powers of judging, of abstracting, and of reasoning, are concerned; there will also be a species of excitement of the feelings. And it will be found, that no feeling will effectually con-

fine the minds of men in scientific pursuits, but a love of the truth.

Mr. Locke thought, that the person, who should find out a remedy for the wandering of thoughts, would do great service to the studious and contemplative part of mankind. We know of no other remedy, than the one just mentioned, A LOVE OF THE TRUTH, a desire to know the nature and relations of things, merely for the sake of knowledge. It is true, that a conviction of duty will do much; ambition and interest may possibly do more; but when the mind is led to deep investigations by these views merely, it is a tiresome process, and after all is ineffectual. Nothing but a love of the truth for its own sake will permanently keep off the intrusions of foreign thoughts, and secure a certainty of success. The excellency, therefore, of knowledge, considered merely as suited to the intellectual nature of man, and as indicative of the character of that Being, who is the true source of all knowledge and the fashioner of all intellect, cannot be too frequently impressed.

The person, who is capable of strictly fixing his attention, will have a great advantage over others. Of two persons, who seem naturally to have equal parts, the one, who possesses this characteristic, will greatly excel. So that it is hardly too much to say, that it may become a sort of substitute for genius itself.

CHAPTER FIFTEENTH.

DREAMING.

§. 242. *Definition of dreams and the prevalence of them.*

Among numerous other subjects in mental philosophy, which claim their share of attention, that of Dreaming is entitled to its place; nor can we be certain, that any other will be found more appropriate to it than the present, especially when we consider, how closely it is connected in all its forms with our sensations and conceptions. And what are Dreams? It approaches perhaps sufficiently near to a correct general description to say, that they are our mental states and operations while we are asleep. But the particular views, which are to be taken in the examination of this subject, will not fail to throw light on this general statement.

The mental states and exercises, which go under this name, have ever excited much interest. It is undoubtedly one reason of the attention, which the subject of our dreams has ever elicited among all classes of people, that they are so prevalent; it being very difficult, if not impossible, to find a person, who has not had more or less of this experience. Mr. Locke, however, tells us of an individual, who never dreamed till the twenty sixth year of his age, when he happened to have a fever, and then dreamed for the first time. Plutarch also mentions one Cleon, a friend of his, who lived to an advanced age, and yet had never

dreamed once in his life, and remarks, that he had heard the same thing reported of Thrasymedes.

Undoubtedly these persons dreamed very seldom, as we find that some dream much more than others; but it is possible, that they may have dreamed at some times, and entirely forgotten it. So that it cannot with certainty be inferred from such instances as these, that there are any, who are entirely exempt from dreaming.

§. 243. *Connection of dreams with our waking thoughts.*

In giving an explanation of dreams, our attention is first arrested by the circumstance, that they have an intimate relationship with our waking thoughts. The great body of our waking experiences appear in the form of trains of associations; and these trains of associated ideas, in greater or less continuity, and with greater or less variation, continue when we are asleep. Many facts show this.

Condorcet, (a name famous in the history of France,) told some one, that while he was engaged in abstruse and profound calculations, he was frequently obliged to leave them in an unfinished state, in order to retire to rest; and that the remaining steps and the conclusion of his calculations have more than once presented themselves in his dreams.——Franklin also has made the remark, that the bearings and results of political events, which had caused him much trouble while awake, were not unfrequently unfolded to him in dreaming.——"In my sleepless nights, and in my *dreams*, (says Fouché, when fleeing into Italy in conseqence of certain alleged political heresies,) I imagined myself surrounded by executioners, and seemed, as if I beheld, in the native country of Dante, the inexorable vision of his infernal gates."*

It seems clearly to follow from such statements as these, which are confirmed by the experience of almost every person, that our dreams are fashioned from the ma-

* Memoirs of Fouche, duke d'Otranto, minister of the General Police of France, p. 267.

terials of the thoughts which we have while awake; in other words they will, in a *great* degree, be merely the repetition of our customary and prevailing associations.

§. 244. *Dreams are often caused by our sensations.*

But while we are to look for the materials of our dreams in thoughts which had previously existed, we further find that they are not beyond the influence of those slight bodily sensations, of which we are susceptible even in hours of sleep. These sensations, slight as they are, are the means of introducing one set of associations rather than another.

Dugald Stewart relates an incident, which may be considered an evidence of this, that a person, with whom he was acquainted, had occasion, in consequence of an indisposition, to apply a bottle of hot water to his feet when he went to bed, and the consequence was, that he dreamed he was making a journey to the top of mount Ætna, and that he found the heat of the ground almost insupportable. There was once a gentleman in the English army, who was so susceptible of audible impressions, while he was asleep, that his companions could make him dream of what they pleased. Once, in particular, they made him go through the whole process of a duel, from the preliminary arrangements to the firing of the pistol, which they put into his hand for that purpose, and which, when it exploded, waked him.

A cause of dreams closely allied to the above is the variety of sensations, which we experience from the stomach, viscera, &c.——Persons, for instance, who have been for a long time deprived of food, or have received it only in small quantities, hardly enough to preserve life, will be likely to have dreams, in some way or other directly relating to their condition. Baron Trenck relates, that being almost dead with hunger, when confined in his dungeon, his dreams every night presented to him the well filled and luxurious tables of Berlin, from which, as they were presented before him, he imagined he was about to relieve his hunger. "The night had far advanced, (says Irving,

speaking of the voyage of Mendez to Hispaniola,) but those, whose turn it was to take repose, were unable to sleep from the intensity of their thirst; or if they slept, it was but to be tantalized with dreams of cool fountains and running brooks."

The state of health also has considerable influence, not only in producing dreams, but in giving them a particular character. The remark has been made by medical men, that acute diseases, particularly fevers, are often preceded, and indicated by disagreeable and oppressive dreams.

§. 245. *Explanation of the incoherency of dreams.* (*1st cause.*)

There is frequently much of wildness, inconsistency, and contradiction in our dreams. The mind passes very rapidly from one object to another; strange and singular incidents occur. If our dreams be truly the repetition of our waking thoughts, it may well be inquired, How this wildness and inconsistency happen?

The explanation of this peculiarity resolves itself into two parts.——The FIRST ground or cause of it is, that our dreams are not subjected, like our waking thoughts, to the control and regulation of surounding objects. While we are awake, our trains of thought are kept uniform and coherent by the influence of such objects, which continually remind us of our situation, character, and duties; and which keep in check any tendency to reverie. But in sleep the senses are closed; the soul is accordingly in a great measure excluded from the material world, and is thus deprived of the salutary regulating influence from that source.

§. 246. *Second cause of the incoherency of dreams.*

In the second place, when we are asleep, our associated trains of thought are no longer under the control of the mental power or susceptibility, which we term the WILL. We do not mean to say, that the operations of that susceptibility are suspended at such times, and that volitions have no existence. On the contrary, there is sufficient evidence of the continuance of its exercises in some

degree; since volitions must have made a part of the original trains of thought, which are repeated in dreaming; and furthermore, we are often as conscious of exercising or putting forth volitions when dreaming as of any other mental acts, for instance imagining, remembering, assenting, or reasoning. When we dream that we are attacked by an enemy sword in hand, but happen as we suppose in our dreaming experiences, to be furnished in self-defence with an instrument of the same kind, we dream, that we *will* to exert it for our own safety and against our antagonist, and we as truly in this case put forth the mental exercise which we term *volition*, as, in any other, we exercise remembrance, or imagine, or reason in our sleep.

Admitting that the power or susceptibility of willing continues to act in sleep, it is quite evident, that the volitions, which are put forth by it have ceased to exercise their customary influence in respect to our mental operations. But here it will be said, that the will is unable to exercise a direct influence over the successions of thought, even when we are awake. This point has been already examined sufficiently. (See §.214.) The conclusion, at which we there arrived, was, that, although we have no direct, we have an indirect power over the successions of thought, which is very considerable; for instance, by means of a feeling of desire or interest we fix our attention upon some particular part of any general subject, which has been suggested, and thus give a new direction to the whole train of mental operations. Although this power, which we thus exercise, is indirect, we justly consider it a voluntary power, and attribute it to the faculty of the will. But the moment we are soundly asleep, this influence ceases, and hence in connection with the other cause above mentioned, arise the wildness, incoherency, and contradictions, which exist.

A person while he is awake has his thoughts, (admitting to the full extent the power which is commonly ascribed to association,) under such government, and is able, by the indirect influence of volitions, so to direct them, as to bring them in the end to some conclusion, which he

foresees, and which he wishes to arrive at. But in dreaming, as all directing and governing influence, both internal and external, is at an end, our associations seem to be driven forward, much like a ship at sea without a rudder, wherever it may happen.

§. 247. *Apparent reality of dreams.* (*1st cause.*)

When objects are presented to us in dreams, we look upon them as real; and events, and combinations and series of events appear the same. We feel the same interest and resort to the same expedients, as in the perplexities or enjoyments of real life. When persons are introduced, as forming a part in the transactions of our dreams, we see them clearly in their living attitudes and stature; we converse with them, and hear them speak, and behold them move, as if actually present.

One reason of this greater vividness of our dreaming conceptions and of our firm belief in their reality seems to be this. The subjects, upon which our thoughts are then employed occupy the mind exclusively. We can form a clearer conception of an object with our eyes shut, than we can with them open, as any one will be convinced on making the experiment; and the liveliness of the conception will increase in proportion, as we can suspend the exercise of the other senses. In sound sleep, not only the sight, but the other senses also may be said to be closed; and the attention is not continually diverted by the multitude of objects, which arrest the hearing and touch, when we are awake.

It is, therefore, a most natural supposition, that our conceptions must at such times be extremely vivid and distinct. At §. 202, we particularly remarked upon conceptions of those ideas, which we have of absent objects of perception, which possess this vividness of character. And it there appeared, that they might be attended with a momentary belief even when we are awake. But as conceptions exist in the mind when we are asleep in a much higher degree distinct and vivid, what was in the former case a momentary, becomes in the latter a permanent be-

lief. Hence every thing has the appearance of reality; and the mere thoughts of the mind are virtually transformed into persons, and varieties of situation, and events, which are regarded by us in precisely the same light, as the persons, and situations, and events of our every day's experience.

§. 248. *Apparent reality of dreams.* (*2d cause.*)

A second circumstance, which goes to account for the fact that our dreaming conceptions have the appearance of reality is, that they are not susceptible of being controlled, either directly or indirectly, by mere volition.——We are so formed as almost invariably to associate reality with whatever objects of perception continue to produce in us the same effects. A hard or soft body, or any substance of a particular colour, or taste, or smell, are always, when presented to our senses, followed by certain states of mind essentially the same; and we yield the most ready and firm belief in the existence of such objects. In a word, we are disposed from our very constitution to believe in the existence of objects of perception, the perceptions of which do not depend on the WILL, but which we find to be followed by certain states of the mind, whether we choose it or not.——But it is to be recollected, that our dreaming thoughts are mere conceptions; our senses being closed and shut up, and external objects not being presented to them. This is true. But if we conclude in favor of the real existence of objects of perception, because they produce in us sensations independently of our volitions, it is but natural to suppose, that we shall believe in the reality of our conceptions also, whenever they are in like manner beyond our voluntary control. They are both merely states of the mind; and if belief always attends our perceptions, wherever we find them to be independent of our choice, there is no reason, why conceptions, which are ideas of absent objects of perception, should not be attended with a like belief under the same circumstances.—And essentially the same circumstances exist in dreaming; that is, a train of concep-

tions arise in the mind, and we are conscious at such times of being unable to exercise any direction or control whatever over them. They exist, whether we will it or not; and we regard them as real.

§. 249. *Of our estimate of time in dreaming.*

Our estimate of time in dreaming differs from that when awake. Events, which would take whole days or a longer time in the performance, are dreamt in a few moments. So wonderful is this compression of a multitude of transactions into the very shortest period, that when we are accidentally awakened by the jarring of a door, which is opened into a room where we are sleeping, we sometimes dream of depredations by thieves, or destruction by fire, in the very instant of our awaking.——Our dreams will not unfrequently go through all the particulars of a passage of the Alps, or of a military expedition to Moscow, or of a circumnavigation of the globe, or of other, long and perilous undertakings, in a less number of hours, than it took weeks, or months, or even years in the actual performance of them. We go from land to land, and from city to city, and into desert places; we experience transitions from joy to sorrow, and from poverty to wealth; we are occupied in the scenes and transactions of many long months; and then our slumbers are scattered, and, behold, they are the doings of a single watch of the night!

This striking circumstance in the history of our dreams is generally explained by supposing, that our thoughts, as they successively occupy the mind, are more rapid, than while we are awake. But their rapidity is at all times very great; so much so, that, in a few moments, crowds of ideas pass through the mind, which it would take a long time to utter, and a far longer time would it take to perform all the transactions which they concern. This explanation, therefore, is not satisfactory, for our thoughts are oftentimes equally rapid in our waking moments.

The true reason, we apprehend is to be found in those preceding sections, which took under examination the

apparent reality of dreams. Our conceptions in dreaming are considered by us real; every thought is an action: every idea is an event; and successive states of mind are successive actions and successive events. He, who in his sleep has the conception of all the particulars of a military expedition to Moscow, or of a circumnavigation of the globe, seems to himself to have actually experienced all the various and multiplied fortunes of the one and the other. Hence what appears to be the real time in dreams, but is only the apparent time, will not be that, which is sufficient for the mere thought, but that, which is necessary for the successive actions.

"Something perfectly analogous to this may be remarked (says Mr. Stewart) in the perceptions we obtain by the sense of sight.* When I look into a shew-box, where the deception is imperfect, I see only a set of paltry daubings of a few inches in diameter; but if the representation be executed with so much skill, as to convey to me the idea of a distant prospect, every object before me swells in its dimensions, in proportion to the extent of space, which I conceive it to occupy, and what seemed before to be shut within the limits of a small wooden frame, is magnified, in my apprehension, to an immense landscape of woods, rivers, and mountains."

250. *Of the senses sinking to sleep in succession.*

It is true as a general statement, that in sleep the mind ceases to retain its customary power over the muscular movements of the system; and all the senses also are at such times locked up, and no longer perform their usual offices. The effect upon the senses is such, that it seems to be proper to speak of them as individually going to sleep, and awaking from sleep. It remains, therefore, to be observed, that there is some considerable reason to suppose, that the senses fall asleep in succession.——For a detailed explanation and proof of this singular fact reference must be had to Cullen, and particularly to Cabanis, a French writer on subjects of this nature; but the con-

* Stewart's Elements, Chapter on Dreaming.

clusions, at which they arrive on this particular point, may be here stated.*

The sight, in consequence of the protection of the eyelids, ceases to receive impressions first, while all the other senses preserve their sensibility entire; and may, therefore, be said to be first in falling asleep. The sense of taste, according to the above writers, is the next, which loses its susceptibility of impressions, and then the sense of smelling. The hearing is the next in order, and last of all comes the sense of touch.

Furthermore, the senses are thought to sleep with different degrees of profoundness. The senses of taste and smelling awake the last; the sight with more difficulty than the hearing, and the touch the easiest of all. Sometimes a very considerable noise does not awake a person, but if the soles of his feet are tickled in the slightest degree, he starts up immediately.

Similar remarks are made by the writers above referred to, on the muscles. Those, which move the arms and legs, cease to act when sleep is approaching, sooner than those, which sustain the head; and the latter before those, which support the back.——And here it is proper to notice an exception to the general statement at the commencement of this section, that the mind in sleep ceases to retain its power over the muscles. Some persons can sleep standing, or walking, or riding on horseback: with such we cannot well avoid the supposition, that the voluntary power over the muscles is in some way retained and exercised in sleep. These statements are particularly important in connection with the facts of somnambulism; only admit, that the susceptibility of the senses, and the power of the muscles may remain even in part while we are asleep, and we can account for them. We know, that this is not the case in a vast majority of instances, but that it does sometimes happen, is a point, which seems at last to be sufficiently well established.

* Rapports du Physique et du Moral De L'Homme, Mem. x.

§. 251. *General remarks on cases of somnambulism.*

With the general subject of dreaming, that of somnambulism is naturally and intimately connected. Somnambulists are persons, who are capable of walking and of other voluntary actions while asleep. Some of the facts in respect to them are these.——The senses are in general closed, and are not susceptible of being affected by outward objects, much the same as in ordinary sleep; with some slight exceptions, however, hereafter to be mentioned. Hence the somnambulist goes from place to place, and performs other voluntary actions without the use of vision; and yet in some cases he has his eyes open, but is still unable to see. Doing the works of day at unseasonable hours, he piles up his wood at midnight, or yokes his oxen, or ploughs his field, or goes to mill, and all the while is as profoundly asleep as any of his neighbors; until he falls over some obstacle at his feet, or rides against a tree, or is in some other way brought to his recollection. He is not certain of walking in safe places, but may sometimes be found on the roof of houses or on the edge of precipices, but evidently with an utter insensibility to terrour. He is a sort of automatic machine that is carried about from place to place, but without feeling, vision, hearing, or other exercises of the senses; and still more without calculation, or any thing, which may be truly called reasoning; always excepting such calculation and reasoning as may be found in dreams.

§. 252. *Explanation of cases of somnambulism.*

But the inquiry now is, How can these things happen? How can men act and move in this way in sleep, which, in all ordinary cases, implies a deprivation of the muscular power, as well as the closure of the senses.——The explanation, so far as it presents itself at first, is this, viz, (1) The somnambulist is in all cases dreaming, and we may suppose in general, that the dream is one, which greatly interests him.——(2) Those volitions, which are a part of his dreams, retain their power over the muscles, which is not the fact in the sleep and the dreaming of the great body of people.

Consequently, whatever the somnambulist dreams is not only real in the mind, as in all other dreamers, but his ability to exercise his muscles enables him to give it a reality in action. Whether he dream of writing a letter, of visiting a neighbour's house, of thrashing his grain, or ploughing his field, his muscles are faithful to his vivid mental conceptions, which we may suppose in all cases closely connected with his customary labours and experiences, and carry him pretty safely through the operation, however sightless may be his eye, or dull his other senses.

These are the views, which first present themselves in the way of explanation. But the inquiry again arises, How it happens, while, in most cases, both senses and muscles lose their power, in these on the contrary, the muscles are active, while the senses alone are asleep?——In reference to this inquiry, it must be acknowledged, that it is involved at present in some uncertainty, although there is much reason to anticipate, that it may hereafter receive light from further investigations and knowledge of the nervous system and functions. There is a set of nerves, particularly connected with respiration, which appear to have nothing to do with sensation and with muscular action. There is another set, which are known to possess a direct and important connection with sensation and the muscles. These last are separable into distinct filaments, having separate functions; some being connected with sensation merely, and others with volition and muscular motion. In sensation the impression, made by some external body, exists at first in the external part of the organ of sense, and is propagated along one class of filaments to the brain. In volition and voluntary muscular movement, the power of action, as far as the body is concerned, seems to be the reverse, commencing in the brain, and being propagated along other and appropriate nervous filaments to the different parts of the system. And these last-mentioned, in order to cause muscular action, require continuity and soundness not less than those, connected with sensation. Hence it sometimes happens, that in diseases of the ner-

vous system, the power of sensation is, in a great measure, lost, while that of motion fully remains. If the interesting and recently developed facts now referred to should, on further examination, be fully established, they will evidently help to explain the difficulty under consideration. Causes unknown to us may operate, through their appropriate nervous filaments, to keep the muscles awake, without disturbing the repose and inactivity of the senses.

Further; We are not to forget here a remark on the sleep of the senses, a subject already briefly alluded to, and which is an exception to the general statement then made in regard to them. Both in somnambulism and in ordinary cases of dreaming the senses are not always entirely locked up; many observations clearly show, that it is possible for the mind to be accessible through them, and that a new direction may be given in this way to a person's dreams without awaking him. Hence somnambulists may sometimes have very slight visual perceptions; they may in some slight measure be guided by sensations of touch; all the senses may be affected in a small degree by their appropriate objects, or this may be the case with some and not with others, without effectually disturbing their sleep. These facts will be found to help in explaining any peculiar circumstances, which may be thought not to come within the reach of the general explanation, which has been given.

PART SECOND.

INTELLECTUAL STATES OF THE MIND.

CLASS SECOND,

INTELLECTUAL STATES OF INTERNAL ORIGIN.

CHAPTER FIRST.

OF INTERNAL ORIGIN OF KNOWLEDGE.

§. 253. *The soul has fountains of knowledge within.*

We have traced the history of the mind thus far with continued and increased satisfaction, because we have been guided solely by well authenticated facts, without the least desire of exciting wonder by exaggeration, and with no other feeling than that of knowing the truth. With cautious endeavours not to trespass upon those limits, which the Creator himself has set to our inquiries, we have seen the mind placed in the position of a necessary connection with the material world through the medium of the senses, and in this way awakened into life, activity, and power. Dumb matter seems to have been designed and appointed by Providence as the handmaid and nurse of the mind in the days of its infancy; and for that purpose to have been endued with form, and fragrance, and colour the most various and delightful. Material eyes were given to the soul, that it might see; and material hands, that it might handle; and hearing, that it might hear; but the time shall come, when these outward and bodily helps shall be taken away, and it will see, as it were, face to face, and not as in a glass darkly. Even before the body is put off, and the senses are entirely closed up, the spiritual eye begins to open, and the spiritual touch to

feel; in other words the soul finds knowledge in itself. which neither sight, nor touch, nor hearing, nor any other sense, nor any outward forms of matter could give. However interesting and fruitful may have been the train of investigation, which has already been before us, it is to be remembered, that we have hitherto seen the mind unfolding its susceptibilities only in connection with external impressions on the senses. A new view is to be taken of it.

"The natural progress of all true learning, (says the author of Hermes,) is from sense to intellect." Beginning with the senses, and first considering the sensations and ideas which we there receive, we are next to enter more exclusively into the mind itself, and shall there discover a new and prolific source of knowledge. And in thus doing, it is a satisfaction to know, that we are treading essentially in the steps of Mr. Locke, whose general doctrine undoubtedly is, that a part of our ideas only may be traced to the senses, and that the origin of others is to be sought wholly in the intellect itself.

§. 254. *Declaration of Mr. Locke, that the soul has knowledge in itself.*

After alluding to the senses as one great source of knowledge, "the other fountain, (says Locke,) from which experience furnisheth the understanding with ideas, is the perception of the operations of our own minds within us, as it is employed about the ideas it has got; which operations, when the soul comes to reflect on and consider, do furnish the understanding with another set of ideas, which could not be had from things without, and such are perception, thinking, doubting, believing, reasoning, knowing, willing, and all the different actings of our own minds, which we being conscious of, and observing in ourselves, do from these receive into our understandings ideas as distinct, as we do from bodies affecting our senses. This source of ideas every man has wholly in himself. And though it be not sense, as having nothing to do with EXTERNAL objects, yet it is very like it, and might properly

enough be called INTERNAL SENSE. But as I call the other sensation, so I call this Reflection; the ideas it affords being such only as the mind gets by reflecting on its own operations within itself."

It is perhaps necessary to remark here, that we introduce this passage from Mr. Locke, merely in support of the general doctrine, without wishing to intimate a full approbation of the manner, in which he has applied it in its details. What we say now concerns the general question; and in reference to that question, the passage just referred to is undoubtedly weighty in itself, as well as in consequence of the great fame and acknowledged discernment of its author. It would seem to be the doctrine of Mr. Locke, that our knowledge begins with sensation; that impressions, made on the bodily system, are the first occasions of bringing the mind into action, so far as we can judge. Nor is it necessary to make any objection to this view; it is very reasonable, and pains have already been taken to show, that it is clearly worthy of the utmost regard. But it does not follow from this, (and the passage just quoted shows, that Mr. Locke did not suppose it thus to follow,) that the sensation is the only source of knowledge. There is undeniably something distinct from sensation; thoughts, which have an interiour origin, and cannot be represented by any thing external; principles, so far from being directly dependent on sensation, that they control, compare, appreciate, judge of it.

§. 255. *Opinions of Dr. Cudworth on the general subject of internal knowledge.*

We may properly introduce here a quotation or two from another great authority, nearly contemporaneous with Mr. Locke, that of Dr. Cudworth, a name which is acknowledged to rank deservedly high among those, which are most closely associated with exalted wisdom and virtue. Let us however be again reminded, that our whole object here is to establish the general position, that there is knowledge of a purely internal, as well as of an external origin; and that, therefore, a reference to writers for

that purpose does not necessarily involve an approbation of, or a responsibility for their opinions any farther than they relate to the particular object in view.——The posthumous work, from which these extracts are made, is understood to have been written in reply to Mr. Hobbes, who held the opinion, that all our thoughts of whatever kind are only either direct, or transformed and modified sensations. And therefore the statements made in it, being called forth under such circumstances, must be supposed to have been carefully meditated, and on that ground, among others, are entitled to much weight.

"That oftentimes, says Cudworth,* there is more taken notice of and perceived by the mind, both in the sensible objects themselves, and by occasion of them, than was impressed from them, or passively received by sense; which therefore must needs proceed from some inward active principle in that which perceives, I shall make it further appear by some other instances.

"For, first, let a brute and a man at the same time be made spectators of one and the same artificial state, picture, or landskip; here the brute will passively receive all that is impressed from the outward object upon sense by local motion, as well as the man, all the several colours and figures of it; and yet the man will presently perceive something in this statue or picture, which the brute takes no notice of at all, viz. beauty, and pulchritude, and symmetry, besides the liveliness of the effigies and pourtraiture. The eye of the brute being every jot as good a glass or mirror, and perhaps endued with a more perspicacious sense or power of passive perception, than that of a man.

"Or again, let both a man and a brute at the same time hear the same musical airs, the brute will only be sensible of noise and sounds; but the man will also perceive harmony in them, and be very much delighted with it; nay, even enthusiastically transported by it. Wherefore the brute perceiving all the sounds, as well as the man, but nothing of the harmony, the difference must needs arise

*Immutable Morality, Book IV, Chap. II. §. 14.

from some inward active principle or anticipation in the man, which the brute hath not."

§. 256. *Further remarks of the same writer on this subject.*

"But I shall yet further illustrate this business, (says this eloquent writer near the conclusion of the same chapter,) that the mind may actively comprehend more in the outward objects of sense, and by occasion of them, than is passively received and impressed from them, by another instance. Suppose a learned written or printed volume held before the eye of a brute-creature or illiterate person; either of them will passively receive all that is impressed upon sense from those delineations; to whom there will be nothing but several scrawls or lines of ink drawn upon white paper. But if a man, that hath inward anticipations of learning in him, look upon them he will immediately have another comprehension of them than that of sense, and a strange scene of thoughts presently represented to his mind from them; he will see heaven, earth, sun, moon and stars, comets, meteors, elements, in those inky delineations; he will read profound theorems of philosophy, geometry, astronomy in them, learn a great deal of new knowledge from them that he never understood before, and thereby justly admire the wisdom of the composer of them. Not that all this was passively stamped upon his soul by sense from those characters; (for sense, as I said before, can perceive nothing here but inky scrawls and the intelligent reader will many times correct his copy, finding *erratas* in it;) but because his mind was before furnished with certain inward anticipations, that such characters signify the elements of certain sounds, those sounds certain notions or cogitations of the mind; and because he hath an active power of exciting any such cogitations within himself, he reads in those sensible delineations, the passive stamps or prints of another man's wisdom or knowledge upon them, and also learns knowledge and instruction from them, not as infused into his mind from those sensible characters, but by reason of those hints and significations thereby proposed

to it, accidentally kindled, awakened and excited in it: for all, but the phantasms of black inky strokes and figures, arises from the inward activity of his own mind. Wherefore this instance in itself shews, how the activity of the mind may comprehend more in and from sensible objects, than is passively imprinted by them upon sense."

§. 257. *Knowledge begins in the senses, but has internal accessions.*

In order to have a clear understanding of the particular topic before us, let us briefly advert to certain general views already more or less attended to, having a conection with it. In making the human soul a subject of inquiry, it is an obvious consideration, that a distinction may be drawn between the soul contemplated in itself, and its acts, or states, or the knowledge which it possesses. The inquiry, therefore naturally arises, Under what circumstances the acquisition of knowledge begins?

Now this is the very question, which has already been considered; nor can it be deemed necessary to repeat here the considerations, which have been brought up in reference to it. It is enough to express our continued reliance on the general experience and testimony of mankind, so far as it is possible to ascertain them on a subject of so much difficulty, that the beginnings of thought and feeling and knowledge are immediately subsequent to certain affections of those bodily organs, which we call the SENSES. In other words, were it not for impressions on the senses, which may be traced to objects external to them, our mental capabilities, whatever they may be, would have remained folded up in all probability, and have never been redeemed from a state of fruitless inaction.

Hence the process, which is implied in the perception of external things, or what is commonly termed by Mr. Locke *sensation*, may justly be considered the occasion or the introductory step to all our knowledge. But it does not follow from this, nor is it by any means true, that the whole amount of it in its ultimate progress is to be ascribed directly to the same source. All that can be said with

truth, is, that the mind receives the earliest parts of its ideas by means of the senses, and that, in consequence of having received these elementary thoughts, all its powers become rapidly and fully operative.

And here we come to the SECOND great source of knowledge. The powers of the mind being thus fairly brought into exercise, its various operations then furnish us with another set of notions, which, by way of distinguishing them from those received through the direct mediation of the senses, may be called, in the language of Mr. Locke, ideas of reflection, or, to use a phraseology embracing all possible cases, ideas of INTERNAL ORIGIN.

These two sources of human thought the Internal and External, however they may have been confounded by the writers last alluded to, are entirely distinct. The ideas, which arise in the mind, solely from the fact of the previous existence of certain mental operations, could not have been suggested by any thing, which takes place in the external world, independently of those operations. Of this class, some instances, with illustrations of the same, may properly be mentioned here.

§. 258. *Instances of notions, which have an internal origin.*

Among other notions, which are to be ascribed to the second great source, are those, expressed by the terms, thinking, doubting, believing, and certainty.—It is a matter of internal observation, (that is, of consciousness or of reflection, which are synonymous with internal observation,) that the mind does not and cannot for any length of time remain inactive. Hence there is occasion given for the origin of that idea, which we denominate THINKING.

The notion which we thus call, is framed by the mind under these circumstances; the name is given, and nobody is ignorant as to what is meant. But then it is to be marked that its origin is wholly internal; it is not an object of touch, or taste, or sight; it is to be ascribed to the mind itself alone and to its inherent activity, unaided by the senses or by any thing operating upon them.

Again, in the examination of some topic, which is

proposed for discussion, a proposition is stated with little or no evidence attending it, and the mind, in reference to that proposition, is brought into a position, to which we give the name of *doubting*. It is by no means easy, or rather it is impossible, to trace this idea directly to the senses. All we can say of it, is, that it has its origin within, and necessarily exists immediately subsequent to certain other mental states, of which we are conscious.

But then in this very instance, if the evidence be considerably increased, the mental estimation, which we form, is altered in regard it, and to this new state of the mind we give the name of *belief* or *believing*. And in case the evidence of the proposition is of a higher and more decided character, there then arises another state of the mind, which we denominate *certainty*.

The ideas of virtue and vice, of justice and injustice, of order, proportion, similitude, truth, wisdom, obligation, succession, cause, effect, and many others, have a like origin; at least there are none of them to be ascribed directly and exclusively to the senses.—It is cheerfully granted, that, in determining this point, it is proper to refer to the common experience of mankind, and to rely upon it. But it is believed in all these instances, (certainly in the most of them,) such a reference will be amply decisive.

Let it then be left to the candid internal examination of each individual, to determine, Whether a distinction be not rightly drawn between the origin of these ideas, and that of those, which we attribute to the senses, such as red, blue, sweet, fragrant, bitter, hard, extended, &c.? On this question, it is thought, that in general there can be but one answer, although some minds of superior order have from time to time been betrayed into errour on this subject through the love of excessive simplification.

Hence it is distinctly to be kept in mind, that there are two sources of thought and knowledge. An affection of the senses by means of external objects is the immediate occasion of one portion; the constitution of the mind and its operations are the occasions or source of the other. The one source is called External; the other Internal.

CHAPTER SECOND.

SUGGESTION.

§. 259. *Import of the term suggestion and its application in Reid and Stewart.*

Some of the cases of thought and knowledge, which the mind becomes possessed of in itself, without the direct aid of the senses, are to be ascribed to Suggestion. This word, in its application here, is used merely to express a simple, but important fact, viz, That the mind, by its own activity and vigour, gives rise to certain thoughts. Without any mixture of hypothesis, or any qualifying intimation whatever, it gives the fact, and that is all. The use of this word, as applicable to the origin of a portion of human knowledge, is distinctly proposed by Dr. Reid. In his Inquiry into the Human Mind, (Chap. II. §. 7,) he speaks of certain notions, (for instance, those of existence, mind, person, &c,) as the "judgments of nature, judgments not got by comparing ideas, and perceiving agreements and disagreements, but immediately inspired by our constitution." Pursuing this train of thought, he further remarks; "It is incumbent on those, who think that these are not natural principles, [that is, notions called forth within us, independently of reasoning,] to show how we can otherwise get the notion of mind, and its faculties. Again, immediately after, he ascribes those notions, which cannot be attributed directly to the senses

on the one hand, nor to the reasoning power on the other, to an internal or mental suggestion as follows.—"I beg leave to make use of the word SUGGESTION, because I know not one more proper, to express a power of the mind which seems entirely to have escaped the notice of philosophers, and to which we owe many of our simple notions which are neither impressions nor ideas, as well as many original principles of belief. I shall endeavour to illustrate, by an example, what I understand by this word. We all know that a certain kind of sound suggests immediately to the mind, a coach passing in the street; and not only produces the imagination, but the belief, that a coach is passing. Yet there is here no comparing of ideas no perception of agreements or disagreements, to produce this belief: nor is there the least similitude between the sound we hear, and the coach we imagine and believe to be passing.

"It is true that this suggestion is not natural and original; it is the result of experience and habit. But I think it appears, from what hath been said, that there are natural suggestions; particularly, that sensation suggests the notion of present existence, and the belief that what we perceive or feel, does now exist; that memory suggests the notion of past existence, and the belief that what we remember did exist in time past; and that our sensations and thoughts do also suggest the notion of a mind, and the belief of its existence, and of its relation to our thoughts. By a like natural principle it is, that a beginning of existence, or any change in nature suggests to us the notion of a cause, and compels our belief of its existence. And in like manner, as shall be shown when we come to the sense of touch, certain sensations of touch, by the constitution of our nature, suggest to us extension, solidity, and motion, which are nowise like to sensations, although they have hitherto been confounded with them."——We find similar sentiments of this learned and cautious writer in various other places.

Mr. Stewart also in his Philosophical Essays, speaks of certain mental phenomena, as attendant upon the ob-

jects of our consciousness, and as SUGGESTED by them. The notions of time, number, motion, memory, sameness, personal identity, present existence, &c. he ascribes neither to the external world on the one hand, nor to the internal mental operations, of which we are conscious on the other; except so far as they are the occasions, on which the mind brings them out, or SUGGESTS them from its own inherent energy. Of the notion of DURATION for instance, he would say, I do not see it, nor hear it, nor feel it, nor become acquainted with it by means of any other of the senses; nor am I conscious of it, as I am of believing, reasoning, and imagining, &c. but it is SUGGESTED by the mind itself; it is an intimation absolutely essential to the mind's nature and action.

It will be noticed that Dr. Reid has not limited the use of the word suggestion, exclusively to those cases, which are purely internal. Nor was this necessary. Those cases, however, where suggestion is brought into exercise by occasions chiefly external, (as for instance, in forming the notion of outness or externality,) are few in number, and naturally and almost necessarily come up for consideration in treating of the separate senses. As a general statement, the occasions of its exercise are either wholly of an interiour nature, or with only a slight mixture of outward circumstances.

§. 260. *Ideas of existence, mind, self-existence, and personal identity.*

We shall now mention a few ideas, which have this origin, without undertaking to give a complete enumeration of them.

I.—EXISTENCE. Among the various notions, the origin of which naturally requires to be considered under the head of Suggestion, is that of existence. What existence is in itself, (that is to say independently of any existent being,) it would be useless to inquire. Using the word as expressive of a mental state, it is the name of a purely simple idea, and cannot be defined. The history of its rise is briefly this. Such is our nature, that we

cannot exist, without having the notion of existence. Its origin is inseparable from the mere fact, that we have thought, feeling, and judgment.

II,—MIND. The origin of the notion of mind is similar to that of existence. Neither of them can be strictly and properly referred to the senses. We do not see the mind, nor is it an object of touch, nor of any other sense. Nor, on the other hand, is the notion of mind a direct object of the memory, or of reasoning, or of imagination. The notion arises naturally, or is suggested from the mere fact, that the mind actually exists and is susceptible of various feelings and operations.

III,—Similar remarks will apply to the notions, (whether we consider them as simple or complex,) of SELF-EXISTENCE and PERSONAL IDENTITY. At the very earliest period they flow out, as it were, from the mind itself; not resulting from any prolonged and laborious process, but freely and spontaneously suggested by it. This is so true, that no one is able to designate either the precise time, or the precise circumstances, under which they originate; for they spring into being under all circumstances. We cannot look, or touch, or breathe, or move, or think without them. These are riches of our mental nature too essential and important to be withheld, or to be given only on rare and doubtful occasions; but are spread abroad in all time and place, in all action and feeling.——(See, in connection with this section, §. §. 17, 18, 19.)

§. 261. *Of the nature of unity and the origin of that notion.*

Another important notion, properly entitled to a consideration here, is that of UNITY. We shall decline attempting to explain the nature of unity, for the simple reason that nothing is more easy to be understood; every child knows what is meant by *One*. And how can we explain it, if we would? We can explain a hundred by resolving it into its parts; we can explain fifty or a score by making a like separation of the whole number into the subordinate portions, of which it is made up; but when we arrive at unity, we must stop, and can go no further.

It is true attempts have been made to define it, but like many other such attempts, they have proved futile. Unity has been called *a thing indivisible in itself, and divided from every thing else.* But this makes us no wiser. Is it any thing more than to say, that the unity of an object is its indivisibility? Or in other words that its unity is its unity?

As the idea of unity is one of the simplest, so it is one of the earliest notions which men have. It originates in the same way, and very nearly at the same time with the notions of existence, self-existence, personal identity, and the like. When a man has a notion of himself, he evidently does not think of himself as two, three, or a dozen men, but as *one.* As soon as he is able to think of himself as distinct from his neighbour, as soon as he is in no danger of mingling and confounding his own identity with that of the multitude around him, so soon does he form the notion of unity. It exists as distinct in his mind, as the idea of his own existence does; and arises there immediately successive to that idea, because it is impossible, in the nature of things, that he should have a notion of himself as a twofold or divided person.

Unity is the fundamental element of all enumeration. By the repetition or adding of this element, we are able to form numbers to any extent. These numbers may be combined among themselves, and employed merely as expressive of mutual relation; or we may apply them, if we choose, to all external objects whatever, to which we are able to give a common name.—(See §. 233.).

§. 262. *Nature of succession, and origin of the idea of succession.*

Another of those conceptions, which naturally offer themselves to our notice here, is that of SUCCESSION. This term, (when we inquire what succession is in itself,) is one of general application, expressive of a mode of existence rather than of existence itself; and in its application to mind in particular, expressive of a condition of the mind's action, but not of the action itself, which that

condition regulates. It is certainly a fact too well known to require comment, that our minds exist at different periods in successive states; that our thoughts and feelings, in obedience to a permanent law, follow each other in a train. This is the simple fact. And the fact of such succession, whenever it takes place, forms the occasion, on which the notion or idea of succession is SUGGESTED to the mind. Being a simple mental state, it is not susceptible of definition; yet every man possesses it, and every one is rightly supposed to understand its nature.

Accordingly it is not necessary to refer the origin of this idea to any thing external. It is certain, that the sense of smell cannot directly give us the idea of succession, nor the sense of taste, nor of touch. And we well know, that the deaf and dumb possess it, not less than others. The blind also, who have never seen the face of heaven, nor beheld that sun and moon, which measure out for us days and months and years, have the notion of succession. They feel, they think, they reason, at least in some small degree, like other men; and it is impossible, that they should be without it. The origin, therefore, of this notion is within; it is the unfailing result of the inward operation to call it forth, however true it may be that it is subsequently applied to outward objects and events.

§. 263. *Origin of the notion of duration.*

There is usually understood to be a distinction between the idea of succession, and that of duration, though neither can be defined. The idea of succession is supposed to be antecedent in point of time to that of duration; (we speak now of succession and duration relatively to our conception of them, and not in themselves considered.) Duration must be supposed to exist antecedently to succession in the order of nature; but succession is the form, in which it is made to apply to men; and is, therefore, naturally the occasion, on which the idea of it arises in men's minds. Having the notion of succession, and that of personal or self-existence, a foundation is laid for the addi-

tional conception of permanency or duration; in other words, it naturally arises in the mind, or is suggested, under these circumstances.

As we cannot, according to this view of its origin, have the notion of duration without succession, hence it happens, that we know nothing of duration when we are perfectly asleep, because we are not then conscious of those intellectual changes which are involved in succession. If a person could sleep with a perfect suspension of all his mental operations from this time until the resurrection, the whole of that period would appear to him as nothing. Ten thousand years passed under such circumstances would be less than a few days or even hours.

That the notion of succession is antecedent to, and is essential to that of duration, is in some measure proved by various facts. There is for example, in the Proceedings of the French Royal Academy of Sciences in 1719, a statement to the following effect.——There was in Lausanne a nobleman, who, as he was giving orders to a servant, suddenly lost his speech and all his senses. Different remedies were tried, but for a very considerable time without effect. For six months he appeared to be in a deep sleep, unconscious of every thing. At the end of that period, however, resort having been had to certain surgical operations, he was suddenly restored to his speech, and the exercise of his understanding. When he recovered, the servant, to whom he had been giving orders, happening to be in the room, he asked him if he had done what he had ordered him to, not being sensible, that any interval, except perhaps a very short one, had elapsed during his illness.*

§. 264. *Of time and its measurements, and of eternity.*

When duration is estimated or measured, we then call it Time. Such measurements, as every one is aware, are made by means of certain natural, or artificial motions.

*The Academy received this statement from Crousaz, Mathematical Professor at Lausanne, and author of a Treatise on Logic, &c.

The annual revolution of the sun marks off the portion of duration, which we call a YEAR; the revolution of the moon marks off another portion, which we call a month: the diurnal revolution of the sun gives us the period of a DAY; the movements of the hands over the face of a clock or watch give the diminished durations of hours and minutes. This is TIME, which differs from duration, only in the circumstance of its being measured.

What we call Eternity is only a modified or imperfect time, or rather time not completed. We look back over the months and days and years of our former existence; we look forward and onward, and behold ages crowding on ages, and time springing from time. And in this way we are forcibly led to think of time unfinished, of time progressive but never completed; and to this complex notion we give the name of Eternity.

§. 265. *Marks or characteristics of time.*

To this notice of the origin of the notion of time, it will not be improper to add, as it is one of great importance, some of its marks or characteristics.

I,—Time, (meaning by the term duration as existing in succession, and as susceptible of being measured,) is strictly and properly predicable only of finite beings, and not of the Supreme Being. It is evident, that, in its application to the human mind, time becomes a law or fixed condition of the mental action, a restriction placed upon it, a sort of veil, which would hide knowledge from us, were it not that it is drawn up gradually, and lets it in by degrees. But it is equally evident there can be no law of this nature restricting the Divine Mind. Those multiplied facts and events, which are brought one after another before the minds of men, in consequence of their limited mental constitution, are spread out at once before the Divine Mind, as on a map. Whether past, present, or future, they are embraced and comprehended in a single glance. In this respect there is not the slightest analogy between the Supreme Mind, and the minds of men.

II,—Time is not susceptible of any visible or outward

representation, as might be expected, if its origin had been external instead of internal. It is true, we apply language to time, which would imply, if strictly interpreted, that it has extension or length. We speak of a *long*, or *short* time, &c. But this is owing partly to certain casual associations, and partly to the imperfection of language, and not to any thing in the nature of time itself.

III,—Time, as it exists in our mental apprehension and in its relation to the intellect, is inseparable from events. Whatever event has taken place, whether it be the desolation of a province by an earthquake, or the fighting of a battle, or the forming of a political constitution, or whatever else, although we are ignorant of the hour, the day, or the month, we cannot possibly conceive of them, independently of time. This is a fixed, immutable, and ultimate condition of all our perceptions, so far as they regard events.

IV,—Time, in its specific and appropriate nature, is indestructible, while the human soul remains the same it now does. It is not within the limits of human capability to contemplate events as the Supreme Being does, at once and simultaneously; but it can be done in succession alone; nor have we reason to suppose that it will ever be otherwise. It is true, the Angel shall at last appear, standing on the land and the sea, and shall swear, that time shall be no longer; yet the time, which the angel of the Apocalypse is destined thus to abolish, is only that, which is measured by these stars, this moon, and the revolutions of this earth. As long as the human soul exists, in whatever part of the universe, there must at least be, not only duration, but duration as existing in succession, unless the nature of the soul be fundamentally changed.

§. 265. *The idea of space not of external origin.*

Another of those notions, the origin of which we propose to consider under the head of Suggestion, is the idea of SPACE.——Perhaps it will be asked, why we have disregarded in this instance the authority and example of Mr. Locke, who has ranked it with the notions of Exter-

nal origin, or in his own phraseology, with those which come into the mind by the way of *sensation*. And certainly it might be expected, that we should assent to that ancient arrangement, if it could be definitely shown to us, which of the senses it is to be ascribed to. But it is obvious, that this cannot easily be done.

If it were of external origin, if it could properly be said to come into the mind by the way of sensation, we should be able to make such a reference of it. But let us inquire. It will evidently not be pretended, that the notion of space is to be ascribed to the senses of taste, of smell, or of hearing. And can it be ascribed to the sense of touch? Is it a matter of feeling? A single consideration will suggest a satisfactory answer. It will certainly be acknowledged that we can have no knowledge by the sense of touch, (with the single exception perhaps of the ideas of heat and cold, which are sometimes ascribed to it,) of any thing which does not present some resistance. The degree of resistance may greatly vary, but there will be always some. But no one will undertake to say, that resistance is a quality of space, or enters in any way into his notion of it.

Nor are there less obvious objections to regarding it as a direct object of sight. The sense of sight gives us no direct knowledge of any thing but of colours; all other visual perceptions are original in the sense of touch, and are made the property of the sight by transference. No one certainly ever speaks of space as red, or white, or of any other colour, or conceives of it as such.

There is another consideration, adverse to ascribing the idea of space to the senses, applicable equally to the sight and the touch. Every thing coming within the cognizance of those two senses, (with the exception already alluded to,) has form, limits, bounds, place, &c. But the idea, to which we are now attending, is utterly exclusive of every thing of this nature; it is not susceptible of circumscription and figure. So far from it, when we escape beyond the succession of circumscribed and insulated objects, we have but just entered within its empire. If we let the

mind range forth beyond the forms immediately surrounding us, beyond the world itself, beyond all the systems of worlds in the universe; if we stand in our conception on the verge of the remotest star and look downward and upward; it is then the idea of space rushes upon the mind with a power before unknown.——These considerations clearly lead to the conclusion, that the notion of space is not susceptible of being ascribed directly to sensation in any of its forms, and is not, in the proper sense of the terms, of external origin. It may perhaps be maintained, that we shall find an adequate account of its origin, if we combine the aid of abstraction with sensation. It is admitted, that by the sense of touch we have a knowledge of the extension of bodies, which includes, when it is contemplated under different views, length, breadth, height &c. But still it does not appear, how abstraction, applied to extension, or any thing included in extension, can give us space. It is evident, that the abstract notion, which we form of the length of a body, is different from the one in question. And if we abstract height or breadth, these also come short of giving us space. If we could abstract height, length, and breadth at once, and then combine them together, we should not even then have space, but on the contrary a solid body.

§. 267. *The idea of space has its origin in suggestion.*

What then shall we say of the origin of the notion of space? When pressed on this point, we have but one answer to give; it is the natural offspring of the mind; it is a creation of the soul, wholly inseparable from its elementary constitution and action; an intimation, coming from an interiour and original impulse. The opinion of Cousin, (not to mention that of others of like import,) closely approximates to this statement.

After criticising upon Locke, as Mr. Stewart had done before him, and asserting the futility of pretending to derive this notion directly from the senses, he adds

as follows; "*Au contraire, l'ideè d' espace nous est donneé, à l' occasion de l' ideé de corps, par la penseè, l'entendement, l' esprit, la raison, enfin par une puissance autre que la sensation.*"*

It remains to be added, that, while we cannot directly refer the notion in question to the senses, we cannot even state with certainty any particular occasion on which it arises, for we have the notion at a period further back than we can remember. On this point, however, it is undoubtedly true, that we may advance opinions more or less probable. It is, for instance, a supposition not altogether worthless, that motion may have been the original occasion of the rise of this idea. At an early period we moved the hand, either to grasp something removed at a little distance, or in the mere playful exercise of the muscles, or perhaps we transferred the whole body from one position to another; and it is at least no impossibility, that on such an occasion the idea of space may have been called forth in the soul.

But there is another supposition, still more entitled to notice, the one referred to in the above quotation from Cousin. Our acquaintance with external bodies, by means of the senses, may have been the *occasion* of its rise, although the senses themselves are not its direct source. It is certain, that we cannot contemplate any body whatever, an apple, a rose, a tree, a house, without always finding the idea of space a ready and necessary concomitant. We cannot conceive of a body, which is *no where*. So that we may at least date the origin of the idea of space as early as our acquaintance with any external body whatever. In other words it is a gift of the mind, made simultaneously with its earliest external perceptions.

§. 208. *Characteristic marks of the notion of space.*

What has been said has prepared the way for the better understanding of the characteristic marks of space, as it exists in the mind's view of it. Of these marks there are four, which will help to distinguish it.

*L'Histoire de la Philosophie, Tome II, Dix-septieme Leçon.

I,—Like duration or time, space is not capable of being visibly represented. The remarks, which have already been made, clearly evince this. Nothing can be visibly represented, which does not come within the direct range and cognizance of the senses, as space does not.

II,—It has no form nor limits. This might perhaps be considered as naturally resulting from the characterstic first mentioned. And besides we may safely appeal here to general experience, and assert without hesitation, that no man limits space in his conception of it, nor is it even in his power so to do.

III,—It is absolute and necessary. We speak of a thing as absolute, which is not dependent on another, and is unalterable. This is not the case with any thing whatever, which we become acquainted with by means of the direct agency of the senses. All such bodies are constantly changing, and there is no difficulty in the supposition, that they may all be struck out of existence. But it is impossible for us to associate the idea of non-existence with space. It is unalterably the same. But there is evidently nothing unalterable, which is not naturally and necessarily so. It is on this ground therefore, that we assign to space the characteristic of being absolute and necessary.

IV,—A fourth characteristic is, that it is the condition of the existence of all bodies; that is to say, it is impossible for us to conceive of a body without associating the notion of space with it. We are so constituted, that what we understand by space is utterly inseparable from every thing outward, which has outlines and form. So that we may truly say of space, that it is the condition of the existence of all bodies, at least relatively to ourselves. And hence, as it is internally conceived of, it becomes a great law of the mind, modifying and limiting all its outward perceptions. (See §. §. 57, 8.)

§. 260. *Of the origin of the idea of power.*

Under the head of Suggestion the idea of POWER properly belongs. Every man has this notion; every one feels

too, that there is a corresponding reality; and we may undoubtedly add, that every one knows, although there is a great original fountain of power, that he has a portion of it in his own bosom, and in his own arm. There is a vast unseen power, which has reared the mountains, which rolls the ocean, which propels the sun in his course, and holds the stars in their orbits; but man too has power in the humble sphere, which Providence has allotted him; and is not left desolate. This is a simple statement of the fact. Power goes hand in hand with existence, intelligence, and accountability, and they are alike scattered through the Universe.

But the question here is, not what power is in itself, nor whether man possesses power in fact, but how the notion of power arises in the human mind? Before answering this question, the remark is to be made, that power is an attribute of mind and not of matter. Matter may be the medium, through which the operations of power are exhibited, but it has no power in itself. Hence we are led to observe, that the notion of power originates, in the first instance, in mind, and not in what we see in matter.

Perhaps this remark may be liable to misapprehension; and, therefore, it seems necessary to offer some explanation. The mind, having power, exercises it in reasoning, consulting, forming plans for the future, &c; and particularly in the putting forth of volition. We will to lift a hand or foot, and the result immediately follows; we will to go from one place to another, and we immediately put our determination into execution; we will to complete some projected undertaking, and the deed is consequent on the volition. And we behold in others what we experience in ourselves. Paul said to the impotent man of Lystra, Stand upright on thy feet, and he leaped and walked. The Savior said, Lazarus, come forth, and he arose from the dead. In the beginning the world was in darkness; God said, Let there be light, and light was.

On such occasions we may suppose, that the idea of power arises in the mind. It is suggested by the mind itself; and such is our mental nature, that it cannot be otherwise.

But we are perhaps called upon to give a definition or verbal explanation of the notion of power. The reply is, that the idea, which the mind forms of it, is a simple and uncompounded one. It can be resolved into no subordinate elements, and therefore stands on the same footing with our other simple notions. It would be as unavailing to attempt to explain it by a mere combination of words, as it would to give a verbal definition of the simple sensations of taste, of hearing, and of sight.

§. 270. *Notion of an original or first antecedent.*

The only other notion we shall mention under the present head, is that of original antecedence. It will perhaps be said, that this notion arises by experience; but experience properly concerns only the circumstances, which lead to it and under which it arises, and not the mental cause itself. Let us, for example, suppose a person entirely separated from the rest of the world, dwelling in some distant island, with no means of mental culture but such as nature herself affords, furnished, as it were, only with the senses, and with the variety of objects around him, fitted to operate upon them. As he walks abroad in his insulated domain, he finds its shores worn away, and he at once discovers the antecedent in the motion of the ocean's waves against it. He beholds the prostration of the neighbouring forest, and he detects the antecedent in the strong arm of the whirlwind. He sees the grass grow, and the trees put forth their buds and leaves, and the flowers open, and he finds the forerunner of these delightful effects in the warmth and the showers of the summer. But his mind is not satisfied with this; he asks, or rather his nature within him asks, Who guided the ocean? Who gave strength to the whirlwind? And thus the mind will inevitably go on from events to their precursors, from antecedent to antecedent.

No man stops short of this. What would be the thoughts of our supposed solitary islander, will be found to be the thoughts of all. We ourselves, as well as others, behold the world covered with brightness; but, instead of sitting supinely and ignorantly in its beams, we never fail to look for the forerunner, and we find it in the luminaries of the sun and moon, and in those smaller fountains of effulgence, which are opened in various parts of the visible heavens. And then we imagine ourselves standing in the midst of one of those orbs, and the inquiry again arises, Who supplies these fountains? Where is the antecedent power, that kindled up these piles of heavenly radiance?—The mind itself, therefore, suggests the notion of something which goes before, of an antecedent, under every combination of circumstances; and not only believes, that there must have been such, but seeks for it. The event, the fact, whatever takes place in nature, calls for its antecedent, as "deep calls unto deep." It is a voice, if we may again be permitted in a Scriptural allusion, which is "gone out through all the earth, and its words to the end of the world." But there is a time when the cry is silent; a limit, beyond which the inquiry cannot be pushed; and we must at length stop at an original and necessary antecedent, with which all succession begins, and on which all events are dependent.

Hence we say, that the notion of *original* antecedence, in particular, is a matter of suggestion. It does not have its origin in the senses. It evidently does not come within the range of consciousness, because it is something, which, from its very nature, we are not, and cannot be conscious of. It is not the result of relative suggestion since there is nothing compared together; the mind has arrived at a point where it can go no further, and as there are no objects of comparison, there are of course no feelings of relation. And furthermore it is not the result of reasoning, since there is evidently no reasoning applicable to it, which does not take for granted, that there is no beginning nor change of existence without a cause.

That there must be an original antecedent (when combined with the notion of power, the great first cause of all things,) without which subsequent effects and events could not have taken place, must undoubtedly be assumed; for the chain of reasoning, although it may go on from antecedent to antecedent, from cause to cause, must stop somewhere; evidently no human strength can carry it upward to that, which is infinitely removed; but that mysterious first cause must condescend to come down and meet it. And it *has* come. Reasoning does not frame this notion; nevertheless it exists, and with no small degree of distinctness and strength, being necessarily called forth in the soul by means of that primitive or original suggestion, which we have been considering.——We shall pursue, in this place, this particular source of our knowledge no further. But in leaving it, we would not be understood to intimate, that the notions of existence, mind, self-existence, personal identy, unity, succession, duration, time, space, power, and original antecedence are all, which suggestion furnishes. No doubt, on a careful examination, various others may be found.

CHAPTER THIRD.

CONSCIOUSNESS.

§. 271. *Consciousness the second source of internal knowledge; its nature.*

THE second source of that knowledge, which, in distinction from sensations and external perceptions, is denominated Internal, is CONSCIOUSNESS. So numerous are the ideas from this source, constantly forcing themselves on our attention and modifying the whole mental action, that it was considered justly entitled to be ranked among the laws of belief. Although that was a view of consciousness, altogether different from what we propose to take at present, we found occasion at that time to remark particularly on its nature. Nor is it necessary in that respect, to do more than repeat essentially what has already been said. Consciousness is a term, appropriated to express objects, which belong to the mind itself, and which do not, and cannot exist independently of some mind. Imagining and reasoning are terms, expressive of real objects of thought; but evidently they cannot be supposed to exist, independently of some mind, which imagines and reasons. Hence, in the chapter just referred to, (§. 69,) consciousness was described as embracing in itself the three following distinct notions at least; viz., (1) the idea of self or of personal existence, expressed in English by the words SELF, MYSELF, and the personal pronoun I; (2) some quality, state, or

operation of the mind, whatever it may be; and (3) a relative perception of possession, appropriation, or belonging to. For instance, a person says, I AM CONSCIOUS OF LOVE, OR OF ANGER, OR OF PENITENCE. Here the idea of SELF or of personal existence is expressed by the pronoun I; there is a different mental state and expressed by its appropriate term, that of the affection of ANGER, &c; the phrase, CONSCIOUS OF, expresses the feeling of relation, which instantaneously and necessarily recognizes the passion of anger as the attribute or property of the subject of the proposition. And in this case, as in all others where we apply the term under consideration, consciousness does not properly extend to any thing, which has an existence, extraneous to the conscious subject or soul itself.

§. 272. *Objections to Locke's Essay concerning Human Understanding.*

It is proper to remark here, that the term REFLECTION, as used by Mr. Locke in his book on Human Understanding, has been generally understood, (whether justly or not,) as synonymous with Consciousness, as here explained. That writer held, as is well known, that the origin of human knowledge is two-fold, External and Internal; attributing all external knowledge to sensation, and all internal knowledge to reflection. Supposing therefore, that he meant by the term REFLECTION, what is meant at the present day by CONSCIOUSNESS, his commentators and critics have found a difficulty in explaining the origin of those notions among others, which were ascribed in the last chapter to suggestion. Writers, who are in general professed followers of Mr. Locke, and of whose candour it would be highly uncharitable to doubt, appear to agree in opinion, that his valuable Essay is defective in this respect. And it can hardly be doubted, that this is a point, in which it is chiefly assailable, viz, in maintaining the doctrine, that all our internal knowledge is from reflection, understanding the term as synonymous with consciousness. A few quotations will help to show the opinions of respectable writers on this subject.

Dr. REID, in his Third Essay on the intellectual Pow-

ers, has this passage. "Mr. Locke says, that by reflection he would be understood to mean *the notice, which the mind takes of its operations and of the manner of them*. This, I think, we commonly call Consciousness; from which indeed we derive all the notions we have of the operations of our own minds; and he often speaks of the operations of our own minds, as the only objects of reflection.—When reflection is taken in this confined sense, to say, that all our ideas are ideas either of sensation or reflection, is to say that every thing we can conceive is either some object of sense or some operation of our own minds, which is far from being true."

Dr. Price, in his Review of the Principal Questions and Difficulties in Morals, remarks as follows. "Sensation and reflection have been commonly reckoned the sources of all our ideas; and Mr. Locke has taken no small pains to prove this. How much soever, on the whole, I admire his excellent Essay, I cannot think him sufficiently clear or explicit on this head. It is hard to determine exactly what he meant by *sensation and reflection*. If by the former we understand the effects arising from impressions made on our minds by external objects, and by the latter, *the notice the mind takes of its own operations*; it will be impossible to derive some of the most important of our ideas from them."

§. 273. *Opinions of Mr. Stewart on this subject.*

Mr. Stewart in the course of the First of his Philosophical Essays, which is entitled, ON LOCKE'S ACCOUNT OF THE SOURCES OF HUMAN KNOWLEDGE, shows at some length, that we cannot explain the origin of the notions of self, of personal identity, causation, time, number, &c., on the doctrine of Mr. Locke, as it is generally understood; and that they must be regarded as *necessarily arising* in the human understanding in the exercise of its different faculties. Speaking on the subject of Mr. Locke's plan in his Elements of the Philosophy of the Human Mind, (Chap. I; §, 4,) he remarks as follows, "These two sources, according to him, furnish us with all our simple ideas, and the only power which the mind possesses over them, is to perform certain operations, in the way of composition, abstraction,

generalization, &c. on the materials, which it thus collects in the course of its experience. The laudable desire of Mr. Locke, to introduce precision and perspicuity into metaphysical speculations, and his anxiety to guard against errour in general, naturally prepossessed him in favour of a doctrine, which, when compared with those of his predecessors, was intelligible and simple, and which by suggesting a method, apparently easy and palpable, of analyzing our knowledge into its elementary principles, seemed to furnish an antidote against those prejudices, which had been favored by the hypothesis of innate ideas. It is now a considerable time since this fundamental principle of Mr. Locke's system began to lose its authority in England."

In these passages, (and others of a like purport might easily be brought together, if it were deemed necessary,) we see more fully the reason, why it was thought requisite to assign some of those elementary ideas, which come under the general head of Internal Origin, to SUGGESTION. They evidently cannot be assigned to consciousness, without introducing perplexity and confusion into this latter subject. But having attended to those notions, (comparatively few in number but very important,) which are furnished us by an original or primitive intimation of our nature, CONSCIOUSNESS, considered as a new and distinct source of internal knowledge, naturally has the next claim on our notice. It is on these grounds, that the subject occupies its present place.

§. 274. *Instances of notions originating from consciousness.*

It would be no easy task to point out the numerous notions, coming within the range and cognizance of consciousness; nor is there any special reason, why this should be attempted. A few instances will suffice to show, how fruitful a source of experience and of knowledge this is.

1,—All the forms and shades of belief are matters of consciousness. We are so constituted, that the mind necessarily yields its assent, in a greater or less degree, when evidence is presented. These degrees of assent are exceedingly various and multiplied, although only a few of them

are expressed by select and appropriate names; nor does it appear to be necessary for the ends of society, or for any other purpose, that it should be otherwise. Some of them are as follows; doubting, assenting, presumption, believing, probability, high probability, certainty, &c.

II,—The names of all intellectual powers and operations are expressive of the subjects of our consciousness. Among others, the terms, thinking, attending, remembering, comparing, judging, abstracting, reasoning, imagining, &c.

III,—Consciousness includes likewise all our emotions, (every thing coming within the range of the SENTIENT part of our nature,) as the emotions of the beautiful, the grand, the sublime, the ludicrous; the feelings of pleasure and pain, of desire and aversion; of hope and joy, of despondency and sadness, and a multitude of others.

IV,—Here also originates our acquaintance with the complex emotions or passions. A man bestows a benefit upon us, and we are conscious of a new complex feeling, which we call GRATITUDE. Another person does us an injury, and we are conscious of another and distinct feeling, which we call ANGER. In other words, we feel, we know, that the passion exists, and that it belongs to ourselves; and it is the same of distrust, jealousy, peevishness, hatred, revenge, friendship, sympathy, love, &c.

V,—All the moral and religious emotions and affections belong here; such as approval, disapproval, remorse, humility, repentance, religious faith, forgiveness, benevolence, the sense of dependence, adoration.——When we consider, that the mind is constantly in action, that, in all our intercourse with our fellow-beings, friends, family, countrymen, and enemies, new and exceedingly diversified feelings are called forth, that every new scene in nature, and every new combination of events have their appropriate results in the mind, it will be readily conjectured, that this enumeration might be carried to a much greater extent. What has been said will serve to indicate some of the prominent sources for self-inquiry on this subject.

CHAPTER FOURTH.

RELATIVE SUGGESTION.

§. 275. *Of the susceptibility of perceiving or feeling relations.*

It is not inconsistent with the usage of our language to say, that the mind brings its thoughts together, and places them side by side, and compares them. Such are nearly the expressions of Mr. Locke, who speaks of the mind's bringing one thing to and setting it by another, and carrying its view from one to the other. And such is the imperfect nature of all arbitrary signs, that this phraseology will probably continue to be employed, although without some attention it will be likely to lead into errour. Such expressions are evidently of material origin, and cannot be rightly interpreted without taking that circumstance into consideration. When it is said that our thoughts are brought together, that they are placed side by side and the like, probably nothing more can be meant than this, that they are immediately successive to each other. And when it is further said, that we compare them, the meaning is, that we perceive or feel their relation to each other in certain respects.

The mind, therefore, has an original susceptibility or power, answering to this result; which is sometimes known as its power of RELATIVE SUGGESTION, and at other times, the same thing is expressed by the term JUDGMENT,

although the latter term is not limited in its use to the expression of this feeling.*——We arrive here, therefore, at an ultimate fact in our mental nature. The human intellect is so constituted, that, when it perceives different objects together, or has immediately successive conceptions of any absent objects of perception, their mutual relations are immediately felt by it. It considers them as equal or unequal, like or unlike, as having the same or different causes or ends, and in various other respects.

§. 276. *Occasions on which feelings of relation may arise.*

The occasions, on which feelings of relation may arise, are almost innumerable. It would certainly be no easy task to specify them all. Any of the ideas, which the mind is able to frame, may either directly or indirectly, lay the foundation of other ideas of relation, since they may in general be compared together; or if they cannot themselves be readily placed side by side, may be made the means of bringing others into comparison. But those ideas, which are of an external origin, are representative of objects and their qualities; and hence we may speak of the relations of things no less, than of the relations of thought. And such relations are every where discoverable.

We behold the flowers of the field, and one is fairer than another; we hear many voices, and one is louder or softer than another; we taste the fruits of the earth, and one flavour is more pleasant than another. But these dif-

* The word JUDGMENT is sometimes used as expressive of the result of a train of reasoning, and as synonymous with conclusion or opinion. But not unfrequently it is employed with a more restricted import, and as synonymous with relative suggestion. The following passage of Brown supports this remark.——"With the susceptibility of relative suggestion, the faculty of *judgment*, as that term is commonly employed, may be considered as nearly synonymous; and I have accordingly used it as synonymous in treating of the different relations, that have come under our review." Philosophy of the Human Mind, Lect. 51.

ferences of sound and brightness and taste could never be known to us without the power of perceiving relations.

Again, we see a fellow being; and as we make him the subject of our thoughts, we at first think of him only as a man. But then he may at the same time be a father, a brother, a son, a citizen, a legislator; these terms express ideas of relation.

§. 277. *Of the use of correlative terms.*

Correlative terms are such terms, as are used to express corresponding ideas of relation. They suggest the relations with great readiness, and by means of them the mind can be more steadily, and longer, and with less pain, fixed upon the ideas, of which they are expressive. The words father and son, legislator and constituent, brother and sister, husband and wife, and others of this class, as soon as they are named, at once carry our thoughts beyond the persons, who are the subjects of these relations, to the relations themselves. Wherever, therefore, there are correlative terms, the relations may be expected to be clear to the mind.

The word, CITIZEN, is a relative term; but there being no correlative word, expressing a precisely corresponding relation, we find it more difficult to form a ready conception of the thing signified, than of SUBJECT, which has the correlatives, ruler and governor.

§. 278. *Of the relations of identity and diversity.*

The first class of ideas of relation, which we shall proceed to consider, are those of IDENTITY and DIVERSITY.

Such is the nature of our minds, that no two objects can be placed before us essentially unlike, without our having a perception of this difference. When, on the other hand, there is an actual sameness in objects contemplated by us, the mind perceives or is sensible of their identity. It is not meant by this, that we are never liable to mistake; that the mind never confounds what is different, nor separates what is the same; our object here is merely to state the general fact.

Two pieces of paper are placed before us, the one white and the other red; and we at once perceive, without delaying to form comparisons and to reason upon it, that the colours are not the same. We immediately and necessarily perceive a difference between a square and a circle, a triangle and a parallelogram, the tree and the turf from which it springs upward, a house and the neighbouring hill, a horse and his rider.

Whatever may be the appearance of this elementary feeling at first sight, it is undoubtedly one of great practical importance. It has its place in all forms of reasoning, as the train of arguments proceeds from step to step; and in Demonstrative reasoning in particular, it is evident, that without it we should be unable to combine together the plainest propositions.

§. 279. *Of the relations of identity and diversity called axioms.*

The remark at the close of the last section will be better understood, on a little further explanation. The statement was, that without the relative feelings of IDENTITY and DIVERSITY, (otherwise called relations of AGREEMENT and DISAGREEMENT,) we should be incapable of demonstrative reasoning. Such reasoning, as is well known, is carried on by the help of axioms. And we accordingly never fail to find a number of axioms placed at the head of geometrical, and other treatises of a like nature, such as the following; Things equal to the same are equal to one another; If equals be added to equals, the wholes are equal; The whole is greater than a part; Things, which are double of the same, are equal to one another; Things which are halves of the same, are equal to one another; Magnitudes, which coincide with one another, (that is, which exactly fill the same space,) are equal to one another, &c.

It will be admitted, (and we shall see it perhaps more clearly, when we again have occasion to revert to this subject,) that demonstrative reasoning implies a constant reference to such axioms; that its advancement through the successive series of propositions is by means of their aid.

But it is too evident to require remark, that these axioms are nothing more than particular instances of the relative feeling of identity and diversity, expressed in words. It is the feelings of agreement and disagreement, actually arising in the mind, and not the mere verbal expression of them, which forms the true cement and bond of the successive links, and imparts consistency and strength to the whole chain.

§. 280. (II.) *Relations of fitness or unfitness.*

The second class, (although it may be remarked here, it is of but little practical consequence in what order they are arranged,) are the relations of FITNESS OR UNFITNESS. Or they may be otherwise termed relations of suitableness or unsuitableness, congruity or incongruity. The feeling of the relation of fitness or unfitness arises, as every one's recollection will not fail to inform him, on a multitude of occasions. Coming, for the first time, into the neighborhood of a well-constructed temple or other public edifice, we at once make it the subject of our inspection and examination. With a glance of the eye, we bring the height, and breadth, and length, and local situation of the building under review. We attentively consider the windows, and doors, and vestibule ; the size, formation, number, and position of the columns ; the place and character of the ornamental parts, and we cannot avoid exercising the feeling of fitness, suitableness, or congruity.–In external nature every thing has the character of fitness. If the human mind ever disapproves of the forms and correspondencies of objects, it is because it passes a judgment on a partial knowledge of them, and without waiting to understand all the subordinate parts. But in respect to the imitative combinations of human genius, there is by no means an equal perfection of foresight and excellence of execution ; so that sometimes we have the feeling of fitness and approve ; while at other times, and more frequently, we are sensible of an incongruity, and cannot withhold our disapprobation.

§. 281. (III.) *Relations of degree, and names expressive of them.*

Another class of those intellectual perceptions, which are to be ascribed to RELATIVE SUGGESTION, may properly enough be termed relations of Degree. Such feelings of relation are found to exist in respect to all such objects, as are capable of being considered as composed of parts, and as susceptible, in some respects, of different degrees.

We look, for instance, at two men; they are both tall: but we at once perceive and assert, that one is taller than the other. We taste two apples; they are both sweet: but we say that one is sweeter than another. That is to say, we discover, in addition to the mere perception of the man and the apple, a relation, a difference in the objects in certain respects.

There are terms, in all languages, employed in the expression of such relations. In English a reference to the particular relation is often combined in the same term, which expresses the quality. All the words of the comparative and superlative degrees, formed by merely altering the termination of the positive, are of this description, as whiter, sweeter, wiser, larger, smaller, nobler, kinder, truest, falsest, holiest, and a multitude of others. In other cases, (and probably the greater number,) the epithet, expressive of the quality, is combined with the adverbs *more* and *most*, *less* and *least*. But certainly we should not use such terms, if we were not possessed of the power of relative suggestion. We should ever be unable to say of one apple, that it is sweeter than another, or of one man, that he is taller than another, without considering them in certain definite respects, and without perceiving certain relations. So that, if we had no knowledge of any other than relations of Degree, we should abundantly see the importance of the mental susceptibility under review, considered as a source of words, and of gramatical forms in language.

§. 282. *Relations of degree sometimes exist in adjectives of the positive form.*

Although relations of degree are discoverable more frequently in comparative and superlative adjectives than

ny where else, they may sometimes be detected also in abtract nouns, which have the appearance of being entirely positive, and not unfrequently in adjectives of the positive orm.—Let it be considered, as one instance among many others, what we mean, when we say of a person, He is an AGED man. Although the epithet has the positive form, we always tacitly compare the age of the subject of it with that of others, of people in general, and place the particular number of years, to which he may have attained, by the side of that period, which we are in the habit of regarding as the ordinary term of man's pilgrimage.—It is the same, when we say of any person, that he is YOUNG. He is then, by a tacit mental reference, considered as falling far short, of an assumed period, an approximation to which gives to another person the reputation of age.

Buffier, whose remarks are generally entitled to great weight, happily illustrates this subject as follows.*

If we should, for example, never have seen or heard of any hill or mountain of greater height than a quarter of a mile, as might happen to some of the inhabitants of the Low Countries, a mountain a mile high would appear a considerable one to such people; but this mountain would be looked upon as inconsiderable and trifling to the people of the Alps, who are accustomed to see mountains of much greater height. This example is so striking, that there is no necessity for any other to make us sensible of the nature of relations that are founded on an arbitrary idea, formed either by accident and occasion, or by our own fancy; as if I should take it into my head, without any foundation, that pearls are generally an inch in diameter, I must in that case, look upon all the pearls we have in France as very small.

"What has been here said of greatness is manifestly applicable to all the other qualities of *long*, *broad*, *happy*, *unhappy*, *convenient*, *inconvenient*, *easy*, *difficult*, *rich*, *poor*, *good*, *bad*, *excellent*, and many others of a similar nature, that have no determinate sense, but by a relation founded

* First Truths of Pere Buffier, Part II, Chap. XXVIII.

on an arbitrary and accidental idea formed within our ow minds. A man thought himself miserable in having slight head ache : being afterwards seized with a giddines and violent swimming in the head, the first reflection tha occurred to him was, *how happy he was when he had only i first head-ache.* We here see that the arbitrary idea, o which the comparsion and relation are founded, change the signification, and in a manner the nature, of the qua ities of *happy* and *miserable.*"

§. 283. (IV) *Of relations of proportion.*

Among other relations are those of PROPORTION, which are peculiar in being felt only on the presence of three o more objects of thought. They are discoverable particularly in the comparison of numbers, as no one proceeds far in numerical combinations without a knowledge of them. On examining the numbers two, three, four, twenty, twenty seven, thirty two, nine, five, eight, and sixteen, we feel certain relations existing among them ; they assume a new aspect, a new power in the mental view. We feel, (and we can assert, in reference to that feeling,) that three is to nine as nine to twenty seven ; that two is to eight as eight to thirty two ; that four is to five as sixteen to twenty, &c.

And when we have once felt or perceived such relation actually existing between any one number and others, we ever afterwards regard it as a property inseparable from that number, although the property had remained unknown to us, until we had compared it with others.—All this is nothing more than what we do in respect to all the subjects of our knowledge. There are many properties of external bodies, which were not known to us at first, but as soon as they are discovered, they are of course embraced in the general notion, which we form of such bodies, and are considered as making a part of it. It is the same in respect to numbers. If, on comparing them with each other, we perceive certain relations never discovered before, those relations ever afterwards make a part of them.

§. 284. (V.) *Of relations of place or position.*

Other feelings of relation arise, when we contemplate the place or position of objects. Our minds are so constituted, that such feelings are the necessary results of our contemplations of the outward objects, by which we are surrounded. Perhaps we are asked, What we mean by position or place? Without professing to give a confident answer, since it is undoubtedly difficult by any mere form of words fully to explain it, we have good grounds for saying that we cannot conceive of any body as having place, without comparing it with some other bodies. If, therefore, having two bodies fixed, or which maintain the same relative position, we can compare a third body with them, the third body can then be said to have place or position.

This may be illustrated by the chess-men placed on the chess-board. We say, the men are in the same place, although the board may have been removed from one room to another. We use this language, because we consider the men only in relation to each other and the parts of the board, and not in relation to the room or parts of the room

Again, a portrait is suspended in the cabin of a ship of war; the captain points to it, and says to a bystander, that it has been precisely in the same place these seven years. Whereas in point of fact it has passed from Europe to Africa, from Africa to America, and perhaps round the whole world. Still the speaker uttered no falshood, because he spoke of the portrait, (and was so understood to speak of it,) in relation to the ship and particularly the cabin; and not in relation to the parts of the world, which the ship had visited.—Such instances show that place is relative.

Hence we may clearly have an idea of the place or position of all the different parts of the universe, considered separately, because they may be compared with other parts; although we are unable to form any idea of the place or position of the universe considered as a whole, because we have then no other body, with which we can compare it. If it were possible for us to know all worlds

and things at once, to comprehend the universe with a glance, we could not assert, with all our knowledge of it, that is here, or there, or yonder, or tell, where it would be.

But if place express a relative notion, then it follows, that all words, which involve or imply the place or position of an object, are of a similar character. Such are the words high and low, superiour and inferiour, (when used in respect to the position of objects,) near and distant, above and beneath, further, nearer, hither, yonder, here, there, where, beyond, within, around, without, and the like.

§. 285. (VI.) *Of relations of time.*

Another source of relative perceptions or feelings is TIME. Time holds nearly the same relation to duration, as position does to space. The position or place of objects is but space marked out and limited; time, in like manner, is duration, set off into distinct periods; and as our notions of the place of bodies are relative, so also are our conceptions of events considered as happening in time. It is true, that the notions of duration and space are in themselves original and absolute, but when they are in any way limited, and events are thereby contemplated in reference to them under the new forms of place and time, certain new conceptions arise, which are relative.

All time is contemplated under the aspects of past, present, or future. We are able chiefly in consequence of the revolutions of the heavenly bodies, to form a distinct notion of portions of time, a day, a month, a year, &c; we can contemplate events, not only as existing at present but as future or past. But always when we think or speak of events in time, (in other words when we speak of the *date* of events,) there is a comparison, and a feeling of relation.

What, therefore, is the import of our language, when we say, the independence of the North American colonies was declared, July 4th, 1776.——The meaning of these expressions may be thus illustrated. We assume the present year, 1830, as a given period and reckon back to the

year, *one*, which coincides with the birth of the Saviour; then the year, 1776 expresses the distance between these two extremes, viz. one, and eighteen hundred, thirty. This seems to be all we learn, when we say, the Independence of the United States was declared at the period above mentioned.

We mean the same thing, and convey the same idea, whether we say that the Saviour was born in the year, ONE, of the Christian era, or, in the year, 4004, from the creation of the world. But in the last case, the year 4004, expresses the distance between these two extremes, viz, the beginning of the world, and the present time; while, in the first instance, the event itself forms the beginning of the series.——So that all dates appear to be properly classed under ideas of relation; and also all names whatever, which are in any way, expressive of the time of events, as a second, a minute, day, week, hour, month, year, cycle, yesterday, to-morrow, to-day, &c.

§. 286. (VII.) *Of relations of possession.*

Another class of relations may be called relations of POSSESSION.——Every one knows, that not unfrequently, in his examination of objects, there arises a new feeling, which is distinct from, and independent of the mere conceptions of the objects themselves; and which, as it differs from other feelings of relation, may be termed the relation of possession, or belonging to. This is one of the earliest feelings, which human beings exercise. When we see the small child grasping its top and rattle with joy, and disputing the claims of another to share in them, we may know that he has formed the notion of possession. It is not only formed in early life, but experience fully shows, that it loses neither activity nor strength by the lapse of years.

The application of relative perception in this particular form is abundantly extensive; and we find here a fruitful source of words. The whole class of possessive pronouns, which are to be found in all languages, have their origin here; such as MINE, THINE, YOUR, HIS, HER, &c. The re-

lation of possession is embodied also in the Genitive case of the Greeks, Latins, Germans, and whatever other languages express relations in the same way; in the construct state of nouns in the Hebrew and the other cognate dialects; and in the preposition OF, which is the substitute for the genitive termination in English, and the articles DE, DU, DE'L, and DE LA in French.

The verbs TO BE in English, ESSE in Latin, ETRE in French, (and the same may undoubtly be said of the corresponding verb of existence in all languages,) are often employed to express the relation of possession or belonging to. To say that the rose is red or the orange yellow is as much as to say, that the qualities of yellowness and redness are the possession of, or belong to the rose and orange, But it will be observed, that the relation is not indicated by the name of the subject, nor by the epithet expressive of its quality, but by the verb, which connects the subject and predicate. And similar remarks will apply to many other verbs.

This class of relations is involved in many complex terms, which imply definite qualities and affections of mind, as friend, enemy, lover, hater, adorer, worshipper. These terms not only indicate certain individuals, to whom they are applied, but assert the existence of certain mental affections as their characteristics, and as belonging to them.

§. 287. (VIII.) *Of relations of cause and effect.*

There are relations also of Cause and Effect. We will not delay here to explain the origin of the notions of cause and effect any further than to say, that the notion of cause, as it first exists in the mind, includes nothing more than invariable antecedence. When the antecedence to the event, or the sequence of whatever kind, is our own volition, we have the new idea of power. The idea of invariable antecedence, therefore, which of course supposes some sequence, when it was combined with that of power, constitutes the full notion of cause. When the sequence is found invariably to follow, and its existence cannot be ascribed to any thing else, it is called the EFFECT.

Cause and effect, therefore, have certainly a relation to each other; it is thus that they exist in the view of the mind and in the nature of things, however true it may be, that men are unable to trace any physical connection between them. We cannot conceive of a cause, if we exclude from the list of our ideas the correlative notion of effect, nor, on the other hand, do we call any thing an effect without a reference to some antecedent. These two notions, therefore, involve or imply the existence of each other; that is, are relative.

If, in our notice of outward objects, we examine particular instances of cause and effect, we shall discover grounds of the correctness of this view. No one is ignorant that men usually give the name of events, of occurrences, or facts, to those things, which from time to time fall under their notice, when they are considered in themselves. They are the mere facts, the mere events, and nothing more. But when in the course of their further experience, such events are found to have certain invariable forerunners, they cease to apply these terms, and call them, in reference to their antecedents, EFFECTS. And in like manner the antecedents are called CAUSES, not in themselves considered, but in reference to what invariably comes after.—In this explanation it is obviously unnecessary, independently of what has already been said on the subject, to take into consideration what we understand by Power, which we know and feel to be scattered through the universe; showing itself not only in the movements and efforts of men, but in every blooming flower, and twinkling star, and in all the works of nature, without which there can be neither cause nor effect, neither antecedence nor sequence, neither strength of harmony nor stability of action.

§. 288. *Instances of complex terms involving the relation of cause and effect.*

The simple relative feeling of cause and effect can of course only exist in such cases of cause and effect as come within the knowledge and cognizance of the mind.

This simple feeling, like most other simple states of mind, has but one name, (viz. that of cause and effect,) although arising on innumerable occasions. The relation, however, is embodied in a multitude of names which are expressive of complex objects, such as printer, sculptor, warrior, poet, manufacturer, painter, &c.

This may be thus illustrated. When we look at any interesting piece of statuary, the sight of it naturally suggests its author. But when our mind is thus directed from the statue to the sculptor, it is evident that we do not think of him as we do of a thousand others, but we combine with the conception of the individual a reference to what he has done. We unite with the mere complex notion of man that of cause, and this combination evidently alters its character, making it relative instead of absolute.

In like manner when we look at a fine portrait or historical painting, we are naturally reminded of the artist, whose ingenuity has been displayed in its proportions and colouring. But the word painter, which we apply to him, expresses not merely the man, but comprises the additional notion of the relation of cause, which he holds to the interesting picture before us.

§. 289. *Connection of relative suggestion or judgment with reasoning.*

It may be profitable to notice here the connection, which relative suggestion has with reasoning in general. Feelings of relation, (or elementary judgments, as they may perhaps properly be called,) are, in some respects, to a train of reasoning, what parts are to the whole. But they evidently do not of themselves include all the parts in a train of reasoning, and are distinguished by this peculiarity, that their office, in a great measure, is to connect together other subordinate parts in the train. In the combinations of numbers, and in the various applications of demonstrative reasoning, the relations of PROPORTION and the relations of IDENTITY and DIVERSITY, (otherwise called of AGREEMENT and DISAGREEMENT,) find a conspicuous place. Moral

reasoning embraces all kinds of relations, those of degree, time, place, fitness and unfitness, possession, and cause and effect, as well of agreement and disagreement, and of proportion. Relative feelings, sometimes of one kind and sometimes of another, continually unfold themselves, as the mind advances in an argument.

Although in reasoning there are elements besides feelings of relation, it is evident that it cannot advance independently of their aid. Facts may be accumulated, having close and decisive relations to the points to be proved, but they can never be so bound together as to result in any conclusion, without a perception or feeling of those relations. So that in some respects, the senses, consciousness, original suggestion, memory, testimony, &c, may be regarded as the handmaids, of relative suggestion ; the former furnishing the facts, and the latter rendering them available.

CHAPTER FIFTH.

MEMORY.

290. *Internal knowledge not limited in its origin to one source or one power.*

However it may be regarded as a trite remark, that the memory has an intimate connection with the origin of knowledge, it probably is an indisputable one; although some may see reason for annexing the qualification, that it is less directly a source of ideas in itself, than in its various connections with other mental susceptibilities. We cannot form abstract notions, independently of the aid of the memory; we can neither exercise the power of reasoning nor of imagination without it; it may even be considered as implied in, or at least essential to the notion of personal identity. And how is it possible, therefore, not to regard it as, either directly or indirectly, one of the sources of internal knowledge?—The ways, in which knowledge is let into the mind, are more numerous, than would probably be supposed on a slight or cursory inspection; and it befits us, therefore, to be cautious of limiting its growth and expansion to one cause, to any fixed and exclusive mode of action, and to any single combination of circumstances. Such a limitation would seem to imply a disregard of the general experience on the subject, and a forgetfulness also, that the human soul is the result of divine workmanship, that its existence is beyond the direct cognizance of the senses, that it sustains a multitude of re-

lations, is controlled by uncounted influences, and is susceptible of unlimited developement.

So far, therefore, from saying with Mr. Locke, that consciousness is the only source of internal knowledge, (if such be truly his doctrine, as it is generally understood to be,) we should not only add the sources of primitive and relative suggestion, but should increase the number with every inward susceptibility, and with every specific diversity of interior mental action, the memory, reasoning, imagination, &c. These are all sources of new ideas. But in proceeding to consider them, it is proper to remark, that our attention will be more taken up with the faculties themselves and their action, than with their immediate results on the increase of knowledge. And accordingly, in next proceeding to investigate the memory, we wish to know what the memory is, its diversified character in different individuals, the causes of this diversity, the means of improving it. &c.

§. 291. *Explanations in respect to the faculty of memory.*

MEMORY is that power or susceptibility of the mind, from which arise those conceptions, which are modified by the relation of past time. It is not a simple, but complex state of the intellectual principle, implying (1) a conception of the object, (2) the relation of priority in its existence. That is, we not only have a conception of the object, but this conception is attended with the conviction, that it underwent the examination of our senses, or was perceived by us at some former period.

When we imagine, that we stand in the midst of a forest, or on the top of a mountain, but remain safe all the while at our own fireside, these pleasing ideas of woods, and of skies painted over us, and of plains under our feet, are mere conceptions. But when with these insulated conceptions, we connect the relation of time; and they gleam upon our souls, as the woods, plains, and mountains of our youthful days; then those intellectual states, which were before mere conceptions, become REMEMBRANCES. And the susceptibility, which the mind possesses of these latter complex states, is what usually goes under the name of the power or faculty of MEMORY.

§. 292. *Of the differences in the strength of memory.*

The susceptibility of remembrances is the common privilege of all, and generally speaking, it is possessed in nearly equal degrees. To each one there is given a sufficient readiness in this respect; his ability to remember is such as to answer all the ordinary purposes of life. But, although there is in general a nearly equal distribution of this power, we find a few instances of great weakness, and other instances of great strength of memory.

It is related of the Roman orator, Hortensius, by Seneca, that after sitting a whole day at a public sale, he gave an account from memory, in the evening, of all things sold, with the prices and the names of the purchasers, and that this account, when compared with what had been taken in writing by a notary, was found to be exact in every particular.

The following is an instance of strength of memory somewhat remarkable. An Englishman, at a certain time, came to Frederic the Great of Prussia, for the express purpose of giving him an exhibition of his power of recollection. Frederic sent for Voltaire, who read to his majesty a pretty long poem, which he had just finished. The Englishman was present, and was in such a position, that he could hear every word of the poem; but was concealed from Voltaire's notice. After the reading of the poem was finished, Frederic observed to the author, that the production could not be an original one; as there was a foreign gentleman present, who could recite every word of it. Voltaire listened with amazement to the stranger, as he repeated, word for word, the poem, which he had been at so much pains in composing; and giving way to a momentary freak of passion, he tore the manuscript in pieces. A statement, being made to him of the circumstances, mitigated his anger, and he was very willing to do penance for the suddenness of his passion by copying down the work from a second repetition of it by the stranger, who was able to go through with it, as before.

A great number of instances of this description are found in the records of various individuals, but they must be

considered as exceptions to the general features of the human mind, the existence of which cannot be explained on any known principles. As no one can tell, why one oak on the mountains is tall and large, while its neighbour, on the same soil and of the same description of trees, remains stinted and dwarfish; so we find ourselves unable to give any philosophic explanation of such instances as have been mentioned.

But there are also weak memories, so much so as to be properly considered exceptions to the generally equal distribution of this mental susceptibility. Individuals can be found, from whose memory truths have passed away almost the moment after they have been acquired; and who, in the management of the common concerns of life, discover a forgetfulness extremely unfortunate and perplexing. Instances of this kind are indeed not so frequently found recorded as of an opposite description; because it is more pleasing and satisfactory to the literary annalist to record the excellencies, than the defects of the mind.

§. 293. *Of the effects of disease on the memory.*

Some writers have attempted to explain the phenomena of memory by supposed changes wrought in the cerebral substance; but without assenting to any such hypothesis, it is proper to remark, that it seems to be well established, that there is a connection of some kind between the mind and body. We rightly and fairly infer, that there is such a connection, because there are a multitude of facts, which can be explained on no other supposition; but in what way, or to what extent it exists, it would be worse than futile to assert with the limited knowledge we at present possess.——The general truth, however, that there is a connection of some sort between the mind and body, and consequently, a reciprocal influence, is confirmed, besides other sources of evidence, by some facts in respect to the memory.—I have read, (says Dr. Beattie,) of a person, who falling from the top of a house, forgot all his acquaintances, and even the faces of his own family; and of a learned author, who, on receiving a blow on the

head by a folio dropping from its shelf, lost all his learning, and was obliged to study the alphabet the second time. He further remarks, that he was himself acquainted with a clergyman, who was attacked with a fit of apoplexy. After his recovery, he was found to have forgotten all the transactions of the four years immediately preceding, but remembered as well as ever what had happened before that period. The newspapers, which were printed during the period mentioned, were read with interest, and afforded him a great deal of amusement, being perfectly new.—Thucydides, in his account of the plague of Athens, makes mention of some persons, who survived that disease; but their bodily sufferings had affected their mental constitution, so that they had no recollection of their own former history, had forgotten their friends, and every thing else.

From many instances of this kind, and from others, which go to prove, that the state of the mind, on the other hand, often has a very perceptible effect on the bodily functions, it may justly be inferred, that there is a connection existing between the mind and the body, and that a reciprocal influence is exercised. But what that precise connection is; whether it be limited, on the part of the body, to the brain; on what it depends; in what ways it is modified; are inquiries, which cannot be satisfactorily answered at present, whatever hypothesis may be proposed. Why a fever, or an attack of apoplexy, or a removal of a part of the brain, or an inordinate pressure of it, which are effects on the body, should affect the mind, a spiritual substance, which is supposed to be essentially different from matter, no one is able to say.—The fact, however, that such a reciprocal connection exists, suggests a reason for a due degree of attention to the physical system. The importance of a healthy and vigorous constitution of the body, as being very nearly connected with a corresponding health and vigour of the intellectual principle, should ever be remembered by those in the pursuit of knowledge.

§. 294. *Memory of the uneducated.*

There is a peculiarity in the memories of uneducated

people, of mechanics, farmers, day-labourers, and of all others, who, from the pressure of their particular callings may have had but little means of mental culture. This peculiarity is seen in their great readiness in the recollection of places, times, arrangements in dress and in buildings, local incidents,&c. In their narrations they will be found to specify the time of events; not only the year, but the month, and day, and in their description of persons and places are not less particular. This trait in the mental character of this class of people seems to have arrested the notice of Shakspeare.

Mrs. Quickly in reminding Sir John Falstaff of his promise of marriage, discovers her readiness of recollection in the specification of the great variety of circumstances, under which the promise was made.——*Thou didst swear to me on a parcel-gilt goblet, sitting in my Dolphin chamber, at the round table, by a sea-coal fire, on Wednesday in Whitsun week, when the prince broke thy head for likening him to a singing man of Windsor, &c.*——The coachman in Cornelius Scriblerus gives an account of what he had seen in Bear-garden;—*Two men fought a prize; one was a fair man, a sergeant in the guards; the other black, a butcher; the serjeant had red trousers, the butcher blue; they fought upon a stage about four o'clock, and the serjeant wounded the butcher in the leg.*

The explanation of this peculiarity of memory in common people is this.——It will be kept in mind, that our remembrances are merely conceptions, modified by relations of past time. Removing then the modification of past time, and the remaining element of our remembrances will be conceptions. Our conceptions cannot be called up by a mere voluntary effort, because to will the existence of a conception necessarily implies the actual existence of the conception already in the mind. Our conceptions, therefore, arise in the mind on the principles of association. We come, then, directly to the fact which explains that peculiarity or characteristic of memory, of which we are speaking.

The knowledge, which is possessed by persons of very small education, will be found to be connected together

by the most obvious and easy principles of association; for instance, contiguity in place and time. These people have been very much, we may say chiefly, in the practice of associating those things, which happened at the same time, or were proximate in position. It may be thought that mere time and place are very unimportant relations, but however that may be, they most strongly seize the notice of persons of small education; and by means of them their overflowing multitude of remembrances is kept in place. Having by almost constant exercise greatly strengthened the tendency to those associations, which exist in consequence of mere contiguity, they can very readily tell you, not only the precise *place*, where any thing has happened, but almost every thing, which has happened in the immediate neighborhood; not only the *time*, when the event occurred, but many other things, which occurred about the same period.

§. 296. *Memory of men of philosophical minds.*

From speaking of the power of remembrance in the uneducated, we naturally turn to persons of a reflecting, and philosophic mental character. It has often been remarked of such, that they discover a want of readiness of recollection. The servant in the family of the philosopher will be likely to know much more about the fields, and fences, and cattle of the neighbours; will be more minutely acquainted with their individual dress, and manners, and habits, than the philosopher himself. More than this, he has an aptness, an ability at remembering things of this nature, which his philosophic master evidently does not possess.——Again, we suppose a battle to have been fought; persons of limited intellectual culture will tell you the precise day of the month, the exact number of troops, the names of the regiments, the amount of killed and wounded, and many trifling incidents of individuals, whether solemn or ludicrous, which are fitted subsequently to enliven the narrations of the fireside. But the philosopher, who has read the same accounts, does not remember these particulars, and finds it a very difficult thing

to do it. But we perceive, that his mind has been profitably employed in reflections on the causes of the battle, on various striking developements of human character in its heat and bustle, and on its effects upon the happiness or misery of families and nations.

Many have imagined, that the memory of the uneducated, because it deals so much in minute particulars, is intrinsically stronger, than of others. It is, no doubt, to the multitude a more imposing species of memory, and admirably answers the purpose of those, in whom it appears. But mere contiguity in time and place, which is almost the sole principle that binds together events in the recollection of such persons, is of but small consequence in the estimation of the philosopher. He looks more deeply into the nature of things; their mere outward and incidental circumstances do not particularly arrest his attention; and consequently his knowledge is connected together by less obvious and ready, but more important principles, such as analogy, contrast, and cause and effect.

§. 297. *Of the memory of the aged.*

A defect of memory is often noticed in persons, who are advanced in years. Very few retain those powers of recollection, which they possessed in early days. "Age, says Ossian, is now on my tongue, and my soul has failed; memory fails on my mind."—The failure of this mental susceptibility in the aged seems to be owing to two causes, viz. the impaired state of the organs of perception, and a defect of attention.

(1) *Their organs of external perception are impaired.*

We find it difficult, in consequence of the failure of their sense of hearing, to converse with people, advanced in years, and it requires a great effort, both on our part and theirs, to make them understand what we say. The most conclusive arguments, and flashes of wit, and rich strains of music have in a great measure ceased to excite in them any interest.—There is a like failure of the sense of seeing also. They no longer take pleasure in the delightful aspects of creation. The waving forest, and the

gay beams of the sun, although they have not ceased to have charms for others, have but little or none for them.

(2) *The second cause of the weakness of memory, of which old people complain, is a defect of attention.*——That mental exercise, to which we give the name of attention, always implies desire, an emotion of interest; and without an emotion of this description, it cannot exist. But the world, (including in the term what is beautiful in nature, and what is important in the duties and callings of life,) has at last ceased to excite the emotions, which it formerly awakened. The aged are like the prisoner, released in the period of the French revolution, from the Bastille; they find themselves, as it were, in a new creation, which passes before them with great indistinctness, and with which they feel but little sympathy. And why should it be thought unnatural, that they should neglect in some measure that scene of things, which has already learnt to forget and to neglect them? As their organs of external perception have failed them, and there has also been a defect of attention, the memory, as a natural consequence, has become powerless and broken.

It should, however, be remarked here, that, notwithstanding what has been said, aged people often recal, with great readiness and precision, the feelings and the incidents of their youth. As when a man, who has been greatly prospered, but who at last meets with sudden and disastrous reverses of fortune, finds, in this new state of things, his obsequious attendants fleeing away and turning against him, while only a few early friends remain unmoved in evil and good report; so early feelings and early associations appear to cling with a faithful fondness to the shattered intellects of the aged. The old soldier, who had a share in the American Revolution, will sit down by his fireside and describe with great particularity the scenes, where he toiled and bled, and yet be quite unable to give an account of the incidents of the preceding week.

The explanation of this trait in the mental aspects of the aged seems to be this.——As a general statement, our early feelings and our early associations are the strongest.

That they should be so is not strange, since we have then entered on a state of things, which, in its essential features, is new, and which, in all its diversities of duty, and pleasure, and danger, attracts, and excites us by continual novelty. Who can forget the plains where he wandered in early life? Who can erase from his recollection the associates of those days of wonder, activity, and hope? Who can obliterate from his heart his toils, and his sufferings, and his joys, all of which assumed a peculiar emphasis and importance, being connected with future prospects, the adversities and the successes of after life?——These things remain, while others vanish. Such feelings, so deeply fixed in the mind, and bound together and made permanent by the strength of a mutual association, are frequently recalled; they recur to the soul in the activity and bustle of life, and in those more favoured moments, when it is given up to silent and solemn meditations. The effect of this frequent recurrence can easily be imagined. The early impressions, which are the subjects of such recurrence, become in time, if one may be allowed the expression a part of the mind itself; they seem to be woven into its existence. Hence old men, who have no eye and no hearing for the events, that are passing around them, repeat, with the greatest animation, the stories of scenes, and actions, and friendships of fifty years ago.

§. 208. *Memory of persons of a rich imagination.*

It is a remark of Dr. Watts, that a fine genius is often found to have a feeble memory. By a fine genius he probably understood what we commonly mean by a person of a rich imagination; that is, one, who is furnished with a rich store of images, has readiness in the perception of their congruity or incongruity with each other, and of course has great power in the formation of various new combinations.

Such a person finds a luxuriance of wealth in himself. He is continually and happily entertained with the new pictures, which his imagination creates. Hence he does not so much entertain himself with outward events; many

facts, which are particularly noticed and retained by others, pass by him unregarded; and, therefore, quickly escape from his remembrance. Montaigne (§. 8.) seems to have been a person of this description; acquainted with the general principles of the sciences, possessing an exuberance of intellectual riches, but utterly incapable of remembering dates, times, places, and the numerous matters-of-fact of every day's occurrence.

Weakness of memory in persons of a rich imagination is discovered also in their reading of books. The reason of it seems to be a too great confidence in their own ability. Conscious of their own resources, they are tempted to peruse books in a hasty and careless manner, and without due attention. The result of this careless manner, both in respect to events and the sentiments of authors, is that they are but imperfectly known at first, and are very speedily forgotten. This will not appear strange, in connection with the remark at § 238, on the connection existing between memory and attention. The weakness of memory, therefore, in persons of rich imagination is not constitutional and permanent, but a matter of mere accident; and, for this reason, the more discreditable. When such persons have habitually taken an interest in the common affairs of life, they are found to remember their details, however unpoetical; and in their reading of authors nothing seems to be wanting but interest and attention, in order to secure them from the reproach, under which they are thought to labour.

§. 299. *On the compatibility of strong memory and good judgment.*

By JUDGMENTS we understand here nothing more than the opinions, which we form in view of evidence; in other words, they are the results or conclusions of moral reasoning. By a person of *good* judgment, we accordingly mean one, who examines subjects with caution, and whose results founded on such examination, for the most part prove correct. That persons may possess, in a very high degree, the susceptibility of memory, and still be incapa-

ble of correct moral reasoning or of exhibiting any other indications of a well judging mind, is a fact well known. There have even been idiots, who certainly could present no claims to the character of judging well, that have, nevertheless, been remarkable for memory. Such are, indeed, instances of an extreme kind ;—but there are not wanting many other cases, where strong memories have been found united with feeble judgment. On this fact it may be remarked, as follows.

The connection between a strong memory and a weak judgment, it may be said without any hesitation, is not necessary, but merely accidental ; that is, is not the constitution of nature, but in general the result of circumstances. As it is an accidental state of things, and not any thing essential and permanent in our mental structure, we must look for its appropriate cause in erroneous mental discipline.——It may well be supposed, that those, who possess strong memories, are not insensible of their excellence in this respect ; and the approbation, which they have received in consequence of it, encourages them to treasure up a dry collection of all facts, which will, in any way, bear repetition. Dates, genealogies, local incidents, traditional anecdotes, are all seized, and retained with peculiar avidity. But too much intent upon the mere dates and names of things, such persons fail to inquire into their true nature; they neglect other and more important forms of mental discipline ; and thus justly sustain the reputation of possessing a showy rather than discriminating and sound knowledge. In instances of this description, the relations, by which the suggested trains of thought are associated, are the more slight and obvious ones, such as of time, place, &c. But there are some exceptions to this unwise course ; individuals may be found, who, with an astonishing ability to recal the most unimportant incidents of daily occurrence, as well as the dry details of historical facts, combine the far more enviable ability of discriminating the true differences of things, of combining means for the attainment of ends, and of rightly estima-

ting evidence in its various applications; which are among the characteristics of men of sound judgment.

§. 300. *Intentional memory or recollection.*

The definition of MEMORY, which has been given, is, that it is the power or susceptibility of the mind, from which arise those conceptions, which are modified by the relation of past time. This definition necessarily resolves memory in good part into association. It is, therefore, to be here observed, that our trains of associated thought are not voluntary; that is, are not directly under the control of the WILL. They come and depart, without it being possible for us to exercise any thing more, than an indirect government over them. (See §. 213.) It follows from these facts, that our remembrances also are not voluntary; or, in other words, it is impossible for us to remember in consequence of merely choosing to remember. To will or to choose to remember any thing implies, that the thing in question is already in the mind; and hence there is not only an impossibility resulting from the nature of the mind, but also an absurdity, in the idea of calling up thought by volition. Our chief power, therefore, in quickening and strengthening the memory, will be found to consist in our skill in applying and modifying the various principles or laws of association. And this brings us to a consideration of what is called INTENTIONAL MEMORY or RECOLLECTION; a subject, which was partly illustrated in the section above referred to.

Whenever we put forth an exercise of intentional memory, or make a formal attempt to remember some circumstance, it is evident, that the event in general, of which the circumstance when recalled will be found to be a part, must have previously been an object of attention. That is, we remember the great outlines of some story, but cannot, in the first instance, give a complete account of it, which we wish to do. We make an effort to recal the circumstances not remembered in two ways.——We may, in the *first* place, form different suppositions, and see, which agrees best with the general outlines; the general features

or outlines of the subject being detained before us, with a considerable degree of permanency, by means of some feeling of, desire or interest. This method of restoring thoughts is rather an inference of reasoning, than a genuine exercise of memory.

We may in the *second* place, merely delay upon those thoughts, which we already hold possession of; and revolve them in our minds; until, aided by some principle of association, we are able to lay hold of the particular ideas, for which we were searching. Thus when we endeavour to recite what we had previously committed to memory, but are at a loss for a particular passage; we repeat, a number of times, the concluding words of the preceding sentence. In this way, the sentence, which was forgotten, is very frequently recalled.

§. 301. *Instance illustrative of the preceding.*

We had occasion, in a former section, to mention the case of an individual, who, in consequence of an attack of apoplexy, forgot all the transactions of the four years immediately preceding. It is further to be observed here, that the same individual recovered by degrees all he had lost; so as after a while to have nearly or quite as full a remembrance of that period, as others. In this instance the power of the principles of association appears to have been at first completely prostrated by the disease, without any prospect of their being again brought into action, except by some assistance afforded them. This assistance, no doubt, was reading and conversation. By reading old newspapers and by conversation, he, from time to time, fell upon ideas, which he had not only been possessed of before, but which had been associated with other ideas, forming originally distinct and condensed trains of thought. And thus whole series were restored.——Other series again were recovered by applying the methods of INTENTIONAL RECOLLECTION; that is, by forming suppositions and comparing them with the ideas already recovered, or by continually revolving in mind such trains as were restor-

ed, and thus rousing up others. Such, we can hardly doubt to have been, in the main, the process, by which the person, of whom we are speaking, recovered the knowledge he had lost.

These views, in addition to what has now been said, may be illustrated also by what we sometimes observe in old men. Question them as to the events of early life; and at times they will be unable to give any answer whatever. But whenever you mention some prominent incident of their young days, or perhaps some friend, on whom many associations have gathered, it will often be found, that their memory revives, and that they are able to state many things, in respect to which they were previously silent.

§. 302. *Marks of a good memory.*

The great purpose, to which the faculty of memory is subservient, is, to enable us to retain the knowledge, which we have from our experiences, for future use. The prominent marks of a good memory, therefore, are these two, viz, Tenacity in retaining ideas, and readiness in bringing them forward on necessary occasions.

First; of tenacity or power of retaining ideas.—The impressions, which are made on some minds, are durable. They are like channels worn away in stone, and names engraven in monumental marble, which defy the operation of the ordinary causes of decay, and withstand even the defacing touch of time. But other memories, which at first seemed to grasp as much, are destitute of this power of retention. The inscriptions, made upon them, are like characters written on the sand, which the first breath of wind covers over, and like figures on a bank of snow, which the sun smiles upon, and melts. The inferiority of the latter description of memory to the former must be obvious; so much so as to solicit no comment. A memory, whose power of retaining is greatly diminished, of course loses a great part of its value.

Second; of readiness or facility in bringing forward

what is remembered.—Some persons, who cannot be supposed to be deficient in tenacity of remembrance, appear to fail, in a confident and prompt command of what they remember. Some mistake has been committed in the arrangement of their knowledge; there has been some defect in the mental discipline; or for some other cause, whatever it may be, they often discover perplexity, and remember, as if they remembered not. Their knowledge, although they have it in possession, does not come promptly forth at their bidding, like the soldiers of the believing Centurion, who said to one, Go, and he goeth, and to another, Come, and he cometh. It is the opposite; calls without answers, requistions without obedience.

§. 303. *Directions or rules for the improvement of the memory.*

For the purpose of securing the most efficient action of this inestimable faculty, and particularly that tenacity and readiness, which have been spoken of, the following directions may be found worthy of attention.

(I,)—*Never be satisfied with a partial or half acquaintance with things.*——There is no less a tendency to intellectual, than to bodily inactivity; students, in order to avoid intellectual toil, are too much inclined to pass on in a hurried and careless manner. This is injurious to the memory. "Nothing (says Dugald Stewart,) has such a tendency to weaken, not only the powers of invention, but the intellectual powers in general, as a habit of extensive and various reading without reflection." Always make it a rule fully to understand what is gone over. Those, who are determined to grapple with the subject in hand, whatever may be its nature, and to become master of it, soon feel a great interest; truths, which were at first obscure become clear and familiar. The consequence of this increased clearness and interest is an increase of attention; and the natural result of this is, that the truths are very strongly fixed in the memory. A perpetual vacillation between the honours and toils of science is a species of "halting between two opinions," that is not less injurious in learning, than in religion.

(II,)—*We are to refer our knowledge, as much as possible, to general principles.*——To refer our knowledge to general principles is to classify it; and this is perhaps the best mode of classification. If a lawyer or merchant were to throw all their papers together promiscuously, they could not calculate on much readiness in finding what they might at any time want. If a man of letters were to record in a common place book all the ideas and facts, which occurred to him, without any method, he would experience the greatest difficulty in applying them to use. It is the same with a memory, where there is no classification. Whoever fixes upon some general principle, whether political, literary, or philosophical, and collects facts in illustration of it, will find no difficulty in remembering them, however numerous; when without such general principles the recollection of them would have been extremely burdensome.

(III,)—*Consider the nature of the study, and make use of those helps, which are thus afforded.*——This rule may be illustrated by the mention of some department of science. Thus, in acquiring a knowledge of geography, the study is to be pursued, as much as possible, with the aid of good globes, charts, and maps. It requires a great effort of memory, and generally an unsuccessful one, to recollect the relative extent and situation of places, the numerous physical and political divisions of the earth, from the book. The advantages of studying geography with maps, globes, &c. are two. (1)—The form, relative situation, and extent of countries become, in this case, ideas, or rather conceptions of *sight*; such conceptions (§. 198.) are very vivid, and are more easily recalled to remembrance, than others.

(2) Our remembrances are assisted by the law of contiguity in place, (§. 107,) which is known to be one of the most efficient aids. When we have once, from having a map or globe before us, formed an acquaintance with the general visible appearance of an island, a gulf, an ocean, or a continent, nothing is more easy than to remember the subordinate divisions or parts. Whenever we have examined, and fixed in our minds the general appearance

or outlines of a particular country, we do not easily forget the situation of those countries, which are contiguous.

We find another illustration of this rule in the reading of history.——There is such a multitude of facts in historical writings, that to endeavour to remember them all is fruitless; and if it could be done, would be of very small advantage. Hence, in reading the history of any country, fix upon two or three of the most interesting epochs; make them the subject of particular attention; learn the spirit of the age, and the private life and fortunes of prominent individuals; in a word, study these periods not only as annalists, but as philosophers. When they are thus studied, the mind can hardly fail to retain them; they will be a sort of landmarks; and all the other events in the history of the country, before and afterwards, will naturally arrange themselves in reference to them. The memory will strongly seize the prominent periods, in consequence of the great interest felt in them; and the less important parts of the history of the country will be likely to be retained, so far as is necessary, by the aid of the principle of contiguity, and without giving them great attention.——Further, historical charts or genealogical trees of history are of some assistance for a similar reason, that maps, globes, &c. are in geography.

This rule for strengthening the memory will apply also to the more abstract sciences.——"In every science, (says Stewart, Elements, CH. VI, §. 3,) the ideas, about which it is peculiarly conversant, are connected together by some associating principle; in one science, for instance, by associations founded on the relation of cause and effect; in another, by the associations founded on the necessary relations of mathematical truths."

(IV,)—*The order, in which things are laid up in the memory should be the order of nature.*—In nature every thing has its appropriate place, connections, & relations. Nothing is insulated, and wholly cut off, as it were, from every thing else; but whatever exists or takes place falls naturally into its allotted position within the great sphere of creation and events. Hence the rule, that knowledge, as far forth as

possible, should exist mentally or subjectively in the same order as the corresponding objective reality exists. The laws of the mind will be found in their operation to act in harmony with the laws of external nature. They are, in some sense, the counterparts of each other. We might illustrate the benefits of the application of this rule by referring to almost any well digested scientific article, historical narration, poem, &c. But perhaps its full import will be more readily understood by an instance of its utter violation.

A person was one day boasting, in the presence of Foote the comedian, of the wonderful facility, with which he could commit any thing to memory, when the modern Aristophanes said he would write down a dozen lines in prose, which he could not commit to memory in as many minutes. The man of great memory accepted the challenge; a wager was laid, and Foote produced the following.—"So she went into the garden to cut a cabbage-leaf to make an apple pie; and at the same time a great shebear, coming up the street, pops its head into the shop. What, no soap? So he died, and she very imprudently married the barber; and there were present the Piciniunies, and the Joblillies, and the Garyulies, and the grand Panjandrum himself, with the little round button at the top; and they all fell to playing catch as catch can, till the gunpowder ran out of the heels of their boots."—The story adds, that Foote won the wager. And it is very evident, that statements of this description, utterly disregarding the order of nature and events, must defy, if carried to any great length, the strongest memory.

(V,)—*The memory may be strengthened by exercise.*—Our minds, when left to sloth and inactivity, lose all their vigour; but when they are kept in exercise, and, after performing what was before them, are tasked with new requisitions, it is not easy to assign limits to their ability. This seems to be a general and ultimate law of our nature. It is applicable equally to every original susceptibility, and to every combination of mental action. In repeated instances we have had occasion to refer to its results, both

on the body and the mind. The power of perception is found to acquire strength and acuteness by exercise. There are habits of conception and of association, as well as of perception; and we shall be able to detect the existence and operation of the same great principle, when we come to speak of reasoning, imagination, &c. As this principle applies equally to the memory, we are able to secure its beneficial results, by practising that repetition or exercise, on which they are founded.

CHAPTER SIXTH.

DURATION OF MEMORY.

§. 304. *Restoration of thoughts and feelings, supposed to be entirely forgotten.*

Before quitting the subject of memory, there is another point of view, not wholly wanting in interest, in which it is susceptible of being considered; and that is the permanency or duration of its power to call up its past experiences. It is said to have been an opinion of Lord Bacon, that no thoughts are lost, that they continue virtually to exist, and that the soul possesses within itself laws, which, whenever fully brought into action, will be found capable of producing the prompt and perfect restoration of the collected acts and feelings of its whole past existence.

This opinion, which other able writers have fallen in with, is clearly worthy of examination, especially when we consider, that it has a practical bearing, and involves important moral and religious consequences. Some one will perhaps inquire, is it possible, is it in the nature of things, that we should be able to recall the million of little acts and feelings, which have transpired in the whole course of our lives? Let such an inquirer be induced to consider, in the first place, that the memory has its fixed laws, in virtue of which the mental exercises are recalled; and that there can be found no direct and satisfactory proof of such laws ever wholly ceasing to exist. That

the operation of those laws appears to be weakened, and is in fact weakened, by lapse of time, is admitted; but while the frequency, promptness, and strength of their action may be diminished in any assignable degree, the laws themselves yet remain. This is the view of the subject, which at first obviously and plainly presents itself; and we may venture to add, is recommended by common experience.

It is known to every one, that thoughts and feelings sometimes unexpectedly recur, which had slumbered in forgetfulness for years. Days and months and years have rolled on; new scenes and situations occupy us; and all we felt and saw and experienced in those former days and years appears to be clothed in impenetrable darkness. But suddenly some unexpected event, the sight of a waterfall, of a forest, of a house, a peculiarly pleasant or gloomy day, a mere change of countenance, a word, almost any thing we can imagine, arouses the soul, and gives a new and vigorous turn to its meditations. At such a moment we are astonished at the novel revelations which are made, the recollections which are called forth, the resurrection of withered hopes and perished sorrows, of scenes and companionships, that seemed to be utterly lost.

> "Lulled in the countless chambers of the brain,
> "Our thoughts are linked by many a hidden chain,
> "Awake but one, and lo what myriads rise!
> "Each stamps its image, as the other flies.

This is perhaps a faint exhibition of that perfect restoration of thought, which Bacon and other philosophic minds have supposed to be possible. But, if the statement be correct, it is undoubtedly one circumstance among others in support of that sentiment, although of subordinate weight.

§. 305. *Mental action quickened by influence on the body.*

The ability of the mind to restore its past experiences depends, in some degree, on the state of the physical system. In the preceding chapter it was stated, (and

some facts were referred to in proof of it,) that there is a connection existing between the mind and the body, and that a reciprocal influence is exercised. It is undoubtedly true, that the mental action is ordinarily increased or diminished, according as the body is more or less affected. And may not the exercise of the laws of memory be quickened, as well as the action of other powers? While it is admited, that an influence on the body exerts an influence on the mind, may it not be true, that this general influence sometimes takes the particular shape of exciting the recollection, and of restoring long-past events?

There are various facts, having a bearing on this inquiry, and which seem to show, that such suggestions are not wholly destitute of foundation.

It appears from the statements of persons, who have been on the point of drowning, but have been rescued from that situation, that the operations of their minds were peculiarly quickened. In this wonderful activity of the mental principle, the whole past life, with its thousand minute incidents, has almost simultaneously passed before them, and been viewed as in a mirror. Scenes and situations long gone by, and associates not seen for years, and perhaps buried and dissolved in the grave, came rushing in upon the field of intellectual vision, in all the activity and distinctness of real existence.

If such be the general experience in cases of this kind, it confirms a number of important views; placing beyond doubt, that there is a connection between the mind and body; that the mental operation is susceptible of being quickened; and that such increase of action may be attributable, in part at least, to an influence on the body. The proximate cause of the great acceleration of the intellectual acts, in cases of drowning, appears to be, (as will be found to be the fact in many other similar cases,) an affection of the brain. That is to say; in consequence of the suspension of respiration, the blood is prevented from readily circulating through the lungs, and hence becomes accumulated in the brain. It would seem, that the blood is

never thrown into the brain in unusual quantities, without being attended with unusual mental affections.

§. 306. *Other instances of quickened mental action and of a restoration of thoughts.*

The doctrine, which has been proposed, that the mental action may be quickened, and that there may be a restoration or remembrance of all former thoughts and feelings, is undoubtedly to be received or rejected in view of facts. The only question in this case as in others is, What is truth? And how are we to arrive at the truth?

If the facts, which have been referred to, be not enough to enable one to form an opinion, there are others of a like tendency, and in a less uncertain form. A powerful disease, while at some times it prostrates the mind, at others imparts to it a more intense action. The following passage from a recent work, (although the cause of the mental excitement, in the instance mentioned in it, is not stated,) may properly be appealed to in this connection.—"Past feelings, even should they be those of our earliest moments of infancy, never cease to be under the influence of the law of association, and they are constantly liable to be renovated, even to the latest period of life, although they may be in so faint a state as not to be the object of consciousness.

It is evident then, that a cause of mental excitement may so act upon a sequence of extremely faint feelings, as to render ideas, of which the mind had long been previously unconscious, vivid objects of consciousness. Thus it is recorded of a female in France, that while she was subjected to such an influence, the memory of the Armorican language, which she had lost since she was a child, suddenly returned."*

§. 307. *Effect on the memory of a severe attack of fever.*

We may add here the following account of the mental affections of an intelligent American traveller. He was travelling in the state of Illinois, and suffered the common lot of visitants from other climates, in being taken down

* Hibbert's Philosophy of Apparitions, Pt. IV, CH. 5.

with a bilious fever.—" I am aware, he remarks, that every sufferer in this way is apt to think his own case extraordinary. My physicians agreed with all who saw me, that my case was so. As very few live to record the issue of a sickness like mine, and as you have requested me, and as I have promised to be particular, I will relate some of the circumstances of this disease. And it is in my view desirable in the bitter agony of such diseases, that more of the symptoms, sensations, and sufferings should be recorded than have been; and that others, in similar predicaments, may know, that some before them have had sufferings like theirs, and have survived them.

I had had a fever before, and had risen and been dressed every day. But in this, with the first day I was prostrated to infantine weakness, and felt with its first attack, that it was a thing very different from what I had yet experienced. Paroxysms of derangement occurred the third day, and this was to me a new state of mind. That state of disease, in which partial derangement is mixed with a consciousness generally sound, and a sensibility prenaturally excited, I should suppose the most distressing of all its forms. At the same time that I was unable to recognize my friends, I was informed, *that my memory was more than ordinarily exact & retentive, and that I repeated whole passages in the different languages, which I knew, with entire accuracy. I recited, without losing or misplacing a word, a passage of poetry, which I could not so repeat, after I had recovered my health,*" &c.†

§. 308. *Illustrations of these views from Coleridge.*

An opinion favourable to the doctrine of the durability of memory and the ultimate restoration of thought and feeling, is expressed in the BIOGRAPHIA LITERARIA of S. T. Coleridge, in an article on the Laws of association. In confirmation of it, the writer introduces a statement of certain facts, which became known to him in a tour in Germany in 1798, to the following effect.

† Flint's recollections of the Valley of the Mississippi, Letter 14.

In a Catholic town of Germany, a young woman of four or five and twenty, who could neither read nor write, was seized with a nervous fever, during which she was incessantly talking Greek, Latin, and Hebrew, with much pomp and distinctness of enunciation. The case attracted much attention, and many sentences, which she uttered, being taken down by some learned persons present, were found to be coherent and intelligible, each for itself, but with little or no connection with each other. Of the Hebrew only a small portion could be traced to the Bible; the remainder was that form of Hebrew, which is usually called Rabbinic. Ignorant, and simple, and harmless, as this young woman was known to be, no one suspected any deception; and no explanation could for a long time be given, although inquiries were made for that purpose, in different families, where she had resided, as a servant.

Through the zeal, however, and philosophical spirit of a young physician, all the necessary information was in the end obtained. The woman was of poor parents, and at nine years of age had been kindly taken to be brought up by an old Protestant minister, who lived at some distance. He was a very learned man; being not only a great Hebraist, but acquainted also with Rabbinical writings, the Greek and Latin Fathers, &c. The passages, which had been taken down in the delirious ravings of the young woman were found by the physician precisely to agree with passages in some books in those languages, which had formerly belonged to him. But these facts were not a full explanation of the case. It appeared on further inquiry, that the patriarchal protestant had been in the habit for many years of walking up and down a passage of his house, into which the kitchen door opened, and to read to himself with a loud voice, out of his favourite books. This attracted the notice of the poor and ignorant domestic, whom he had taken into his family; the passages made an impression on her memory; and although probably for a long time beyond the reach of her recollection when in health, they were at last vividly restored, and were uttered in the way above-mentioned,

in consequence of the feverish state of the physical system: particularly of the brain.

From this instance, and from several others of the same kind, which Mr. Coleridge asserts can be brought up, he is inclined to educe the following positions or inferences.——(1) Our thoughts may, for an indefinite time, exist in the same order, in which they existed originally, and in a latent or imperceptible state.——(2) As a feverish state of the brain, (and of course any other peculiarity in the bodily condition,) cannot create thought itself, nor make any approximation to it, but can only operate as an excitement or quickener to the intellectual principle; it is, therefore, probable, that all thoughts are, in themselves, imperishable.——(3) In order greatly to increase the power of the intellect, he supposes it would require only a different organization of its material accompaniment.——(4) And, therefore, he concludes the book of final judgment, which, the Scriptures inform us, will at the last day be presented before the individuals of the human race, may be no other, than the investment of the soul with a *celestial* instead of a *terrestrial* body; and that this may be sufficient to restore the perfect record of the multitude of its past experiences. He supposes, it may be altogether consistent with the nature of a living spirit, that heaven and earth should sooner pass away, than that a single act, or thought, should be loosened and effectually struck off from the great chain of its operations.—In giving these conclusions, the exact language of the writer has not been followed, but the statement made will be found to give what clearly seems to have been his meaning.

§. 309. *Application of the principles of this chapter to education.*

Whether the considerations, which have been brought forward, lead satisfactorily to the conclusions of the durability of memory and of the possible restoration of all mental exercises, must of course be submitted to each one's private judgment. But on the supposition, that they do, it must occur to every one, that certain practical

applications closely connect themselves with this subject.—The principle in question has, among other things, a bearing on the education of the young; furnishing a new reason for the utmost circumspection in conducting it. The term EDUCATION, in application to the human mind, is very extensive; it includes the example and advice of parents, and the influence of associates, as well as more direct and formal instruction. Now if the doctrine under consideration be true, it follows that a single remark of a profligate and injurious tendency, made by a parent or some other person in the presence of a child, though forgotten and neglected at the time, may be suddenly and vividly recalled some twenty, thirty, or even forty years after. It may be restored to the mind by a multitude of unforeseen circumstances, and even those of the most trifling kind; and even at the late period, when the voice, that uttered it, is silent in the grave, may exert a most pernicious influence. It may lead to unkindness; it may be seized and cherished as a justification of secret moral and religious delinquencies; it may prompt to a violation of public laws; and in a multitude of ways conduct to sin, to ignominy, and wretchedness. Great care, therefore, ought to be taken, not to utter unadvised, false, and evil sentiments in the hearing of the young, in the vain expectation that they will do no hurt, because they will be speedily and irrecoverably lost.

And for the same reason, great care and pains should be taken to introduce truth into the mind, and all correct moral and religious principles. Suitably impress on the mind of a child, the existence of a God and his parental authority; teach the pure and benevolent outlines of the Redeemer's character, and the great truths and hopes of the Gospel; and these instructions form essential links in the grand chain of memory, which no change of circumstances, nor lapse of time, nor combination of power can ever wholly strike out. They have their place assigned them; and though they may be concealed, they cannot be obliterated. Perhaps in the hour of temptation to crime, they come forth like forms and voices from the dead, and

with more than their original freshness and power; perhaps in the hour of misfortune, in the prison-house, or in the land of banishment, they pay their visitations, and impart consolation, which nothing else could have supplied; they come with the angel tones of parental reproof and love, and preserve the purity, and check the despondency of the soul.

§. 310. *Connection of this doctrine with the final judgment and a future life.*

There remains one remark more, of a practical nature, to be made.——The views, which have been proposed in respect to the ultimate restoration of all mental experiences, may be regarded as in accordance with the Divine Word. It may be safely affirmed, that no mental principle, which, on a fair interpretation, is laid down in that sacred book, will be found to be at variance with the common experience of mankind. The doctrine of the Bible, in respect to a future judgment, may well be supposed to involve considerations, relative to man's intellectual and moral condition. In various passages, the Scriptures plainly and explicitly teach, that the Saviour in the last day shall judge the world, and that all shall be judged according to the deeds done in the body, whether they be good, or whether they be evil. But an objection has sometimes been raised of this sort, that we can never feel the justice of that decision without a knowledge of our whole past life, on which it is founded, and that this is impossible. It was probably this objection, that Mr. Coleridge had in view, when he proposed the opinion, that the clothing of the soul with a celestial, instead of a terrestrial body, would be sufficient to restore the perfect record of its past experiences.

In reference to this objection to the scriptural doctrine of a final judgment, the remark naturally presents itself, that it seems to derive its plausibility chiefly from an imperfect view of the constitution of the human mind. It is thought, that we cannot be conscious of our whole past life, because it is utterly forgotten, and is, therefore, wholly

irrecoverable. But the truth seems to be, that nothing is *wholly* forgotten; the probability, that we shall be able to recall our past thoughts, may be greatly diminished, but it does not become wholly extinct. The power of reminiscence slumbers, but does not die. At the judgment-day, we are entirely at liberty to suppose from what we know of the mind, that it will awake, and will clearly present before us the perfect form and representation of the past; so that each one shall read for himself his own sentence, and be satisfied of its justice.

We may venture to assert, that there is not only nothing in the nature of the human mind adverse to this supposition; but on the contrary, that the various facts, which have been referred to, are much in its favour. They show not merely that there is a possibility of all our past experiences being recalled, but also that there is no want of causes, by which what is possible may be converted into reality. And if that be the case, it is not necessary to suppose, as many people appear to do, that the multitude of our good and evil thoughts can be preserved and ultimately brought out, only by being laid up in the memory of the Supreme Being. The human mind itself is a safe repository. The soul of every man is a world in itself, complete in all its parts, in all its laws, and powers, and experiences; which nothing but the command of its Creator can permanently sever, and annihilate.

CHAPTER SEVENTH.

REASONING.

§. 311. *The reasoning power a source of new ideas.*

We are next to consider the reasoning power, which is also one of the distinct sources of internal knowledge. For our knowledge of this faculty itself, we are indebted to Consciousness, as was remarked at §. 274. "The names of all intellectual powers and operations are expressive of the subjects of our CONSCIOUSNESS. Among others, the terms, thinking, attending, remembering, comparing, judging, abstracting, reasoning, imagining, &c." Although, therefore, we may say with no want of propriety, that consciousness gives us a knowledge of the mental acts involved in any process of reasoning, yet that process is of itself a source of new views, of new ideas, of new knowledge.

Nor is this a novel doctrine. It was proposed by some of the Greek philosophers; it was advocated by the learned Cudworth; and has been proposed and maintained by more recent writers both in France and England. A person proves, for instance, by a train of reasoning, that the vertical or opposite angles are EQUAL, when two strait lines cross each other. Now in this case, the train of reasoning evidently gives rise to the notion of equality. It is true, that we may have this notion or feeling, when there are only two objects compared together, and when there is

nothing more than a simple act of judgment or relative suggestion. But we have it also, when there are combined acts of judgment; that is to say, when there is a process of reasoning.—Mr. Stewart,(Philos. Essays, First, Ch. III,) has this remark; "What Locke calls agreements and disagreements, are, in many instances, simple ideas,of which no analysis can be given; and of which the origin must, therefore, be referred to reason,according to Locke's own doctrine."—Nor are other weighty authorities wanting. De Gerando,(*De la Generation des Connoissances*,) after holding up to view,that the Judgment or *relative suggestion* is a distinct source of knowledge, expressly adds; "The reasoning faculty also serves to enrich us with ideas; for there are many relations so complicated or remote, that one act of judgment is not sufficient to discover them. A series of judgments or process of reasoning is therefore necessary."

But we would not be understood to limit the results of reasoning, considered as a distinct source of knowledge, to a few simple conceptions. It brings to light the great principles and hidden truths of nature; it gives grand and comprehensive views, which could not otherwise be obtained; and invests men, and external things, and events, in their origin and in their consequences, with a new character.

This subject, however, cannot be pursued here at great length. On the contrary, it is to be remarked here as in respect to the memory,that our attention will be more taken up with the faculty itself and its action, than with a consideration of its immediate results on the increase of knowledge.

§.312. *Of the object and excellency of reasoning.*

It is one of the traits, (perhaps we are not at liberty to say with some persons, it is one of the evils,) of our nature, that we cannot always perceive the truth intuitively, and at once. In many cases we can approach it only by a concatenation of thought; by a progress, oftentimes slow and toilsome, from one step to another. The power of reasoning, therefore, appears to have been given us, in compas-

sion to our weakness, that we may acquire knowledge. which otherwise would not be within our reach.

The excellency of reason is a fruitful subject of remark, as undoubtedly it ought to be a rich and permanent source of gratitude. Its value is particularly discoverable in two things, viz, its flexibility and its growth or expansion.——When we speak of the flexibility of the reasoning power, we mean to intimate the facility and perfect fitness, with which it can apply itself to the numerous and almost infinitely varied subjects of our knowledge. This remark is perhaps susceptible of illustration, by a slight reference to the instincts of the lower animals. Such instincts, according to the usual understanding of their nature, imply an original and invariable tendency to do certain things, without previous forethought and deliberation. There are often many specific instincts in the same animal; one perhaps has relation to the season of the year and the time of migration; another has relation to the nourishment and care of its young; another to the formation of its cell, nest, &c. But whatever the particular form of the instinct, it secures its object promptly, and without mistake. Accordingly it has been observed, that a bird, which has always been confined in a cage, will build, when suitable materials are furnished it, a nest precisely similar to those of its own kind in the woods. It places with the greatest ingenuity the sticks, leaves, and clay of its frail dwelling, without going through a long process of previous training, and without incurring a debt to others for their assistance. But the instinct, in this and other analogous cases, is limited to its one definite object; it discovers an utter inflexibility, neither varying the mode of its action, nor extending its range so as to include other objects.

It's not so with reason. It applies itself to almost every thing. It is not easy to designate and limit the vast number of objects in nature, in events, and individual conduct, where it furnishes its aid, and secures the most beneficial results. It is an instrument equally fitted to investigate the growth of a plant and the formation of a

world; to regulate the concerns of a single family and to administer the affairs of an empire.

The excellency of the reasoning power is seen also in its expansion and growth. Instinct appears to be full and perfect at the very first opportunity of its exercise, but there are no such restricted bounds to reasoning. Though weak at first, it is endlessly progressive. It is seen distinctly at work in the child, that frames his miniature house of small sticks and blocks; and in the architect, whose scientific views and exquisite labours have resulted in forming edifices, that attract a nation's admiration. But how feeble in the one case! And how advanced and expanded in the other!—It increases in growth and expansion, as the years of man roll on; nor have we reason to suppose that even death itself will stay its progress, or diminish its efficiency.

§. 313. *Definition of reasoning, and of propositions.*

Reasoning may be defined the mental process or operation, whereby we deduce conclusions from two or more propositions premised.—A train of reasoning may be regarded, therefore, as a *whole*; and as such it is made up of separate and subordinate parts. These elementary parts are usually termed PROPOSITIONS; and before we can proceed with advantage in the further consideration of reasoning, it is necessary to go into a brief explanation of them.

A PROPOSITION has been defined to be a verbal representation of some perception, act, or affection of the mind. —Accordingly when we speak of a Proposition, we are usually understood to mean some mental perception or combination of perceptions, expressed and laid out before us in words. Although such seems to be the ordinary meaning of the term, we may admit the possibility of propositions existing wholly in the mind, without being expressed in words. Mr. Locke expressly speaks of mental propositions, or those states of mind, where two or more ideas are combined together, pre-

vious to their being embodied and set forth in the forms of language.

The parts of the proposition are,—(1) The SUBJECT, or that, concerning which something is either asserted, or denied, commanded, or inquired; (2) The PREDICATE, or that, which is asserted, denied, commanded, or inquired concerning the subject; (3) The COPULA, by which the two other parts are connected.—In these two propositions,

Cæsar was brave,
Men are fallible,

Men and *Caesar* are the subjects; *fallible* and *brave* are the predicates; *are* and *was* are the copulas.

Propositions have been divided,—(1) Into SIMPLE or those, whose subject and predicate are composed of single words, as in this,

Benevolence is commendable;

(2) Into COMPLEX, or those, where the subject and predicate consist of a number of words, as in this,

Faithfulness in religion is followed by peace of mind;

(3) Into MODAL, where the copula is qualified by some word or words, representing the manner or possibility of the agreement or discrepancy between the subject and predicate, as in these,

Men of learning *can* exert influence;
Wars *may* sometimes be just.

PROPOSITIONS, more or less involved, are necessary parts in every process of reasoning. They may be compared to the separate and disjointed blocks of marble, which are destined to enter into the formation of some edifice. The completed process of reasoning is the edifice; the propositions are the materials.

§. 314. *Process of the mind in all cases of reasoning.*

Leaving the consideration of its subordinate parts or elements, we are further to consider the general nature of reasoning; in other words, we are to examine the character of the complex mental process, involved in that term. The definition given of reasoning, it will be remembered, was, That it is the mental process, by which we deduce

a conclusion from two or more propositions premised. Hence there will be in every such process a succession of propositions, never less than two, and often a much greater number. The propositions often follow each other with much regularity ; and hence not unfrequently we consider the arrangement of them as entirely arbitrary. But this is a mistaken supposition. It is true, when a number of ideas are presented nearly at the same time, the mind puts forth a volition, or exercises choice, in selecting one idea in preference to another. But the ideas, from which the choice is made, and without the presence of which it could not be made, are not caused by volition, and, therefore, mere arbitrary creations; but are suggested by the laws of association.

As an illustration we will suppose an argument on the justice and expediency of capital punishments in ordinary cases. The disputant first denies in general terms the right, which social combinations have assumed of capitally punishing offences of a slight nature. But before considering the cases he has particularly in view, he remarks on the right of capital punishment for murder; and admits, that the principle of self defence gives such a right. He then takes up the case of stealing, and contends, that we have no right to punish the thief with death, because no such right is given by the laws of nature ; for, before the formation of the civil compact, the institution of property was not known. He then considers the nature of civil society, and contends, that, in the formation of the social compact, no such extraordinary power, as that of putting to death for stealing or other crimes of similar aggravation, could have been implied in that compact, because it never was possessed by those, who formed it ; &c.

Here is an argument, made up of a number of proposition, and carried on, as may be supposed, to very considerable length. And in this argument, as in all others, every proposition is, in the first instance, suggested by the laws of association ; it is not at all a matter of arbitrary volition. The disputant first states the inquiry in general terms; he then considers the particular case of murder;

the crime of theft is next considered; and this is examined, first, in reference to natural law, and, afterwards, in reference to civil law.—And this consecution of propositions takes place precisely the same, as when the sight of a stranger in the crowd suggests the image of an old friend, and the friend suggests the village of his residence, and the village suggests an ancient ruin in its neighbourhood, and the ruin suggests heroes and battles of other days.—It is true, that other propositions may have been suggested at the same time, and the disputant may have had his choice between them, but this was all the direct power, which he possessed; and even that in strictness of speech, can hardly be called direct.

§. 315. *Grounds of the selection of propositions.*

A number of propositions are presented to the mind by the principles of association; the person, who carries on the process of reasoning, makes his selection among them. But it is reasonable to inquire, How it happens, that there is such a suitableness or agreement in the propositions, as they are successively adopted into the train of reasoning? And this seems to be no other than to inquire into the circumstances, under which the choice of them is made, or the grounds of the selection.

Let it be considered, then, that in all arguments, whether moral or demonstrative, there is some general subject, on which the evidence is made to bear; there is some point in particular to be examined. In reference to these general outlines, we have a prevailing and permanent desire. This desire is not only a great help in giving quickness and strength to the laws of association; but exercises also a very considerable indirect influence in giving an appropriate character to the thoughts, which are suggested by those laws. Hence the great body of the propositions, which are at such times brought up, will be found to have greater or less reference to the general subject. These are all very rapidly compared by the mind with those outlines, in regard to which its feelings of desire are exercised, or with what we usually term *the point to be proved.*—Here the

mind, in the exercise of that susceptibility of feelings of relation, which we have already seen it to possess, immediately discovers the suitableness or want of suitableness, the agreement or want of agreement of the propositions presented to it, to the general subject. This perception of suitableness, which is one of those relative feelings, of which the mind is from its very nature held to be susceptible, exists as an ultimate fact in our mental constitution. All, that can profitably be said in relation to it, is the mere statement of the fact, and of the circumstances, under which it is found to exist. Those propositions, which are judged by the mind, in the exercise of that capacity which its Creator has given it, to be agreeable to the general subject or point to be proved, are permitted by it to enter in, as continuous parts of the argument. And in this way a series of propositions rises up, all having reference to one ultimate purpose, regular, appropriate, and in their issue laying the foundation of the different degrees of assent.—This explanation will apply not only to the supposed argument in the last section, which is an instance of moral reasoning, but will hold good essentially of all other instances of whatever kind. The difference in the various kinds of reasoning consists less in the mental process, than in the nature of the subjects compared together, and in the conditions attending them.

§. 316. *Of differences in the power of reasoning.*

The faculty of reasoning exists in different individuals, in very different degrees. There is the same diversity here, which is found to exist in respect to every other mental susceptibility and mental process. In some persons it is not even powerful enough to meet the ordinary exigencies of life, and hardly rescues its possessor from the imputation of idiocy ; in others it elevates human nature, and bestows extraordinary grasp and penetration. And between the extremes of extraordinary expansion and marked imbecility, there are multitudes of distinct grades, almost every possible variety.

This difference depends on various causes.——(1) It

will depend, in the first place, on the amount of knowledge, which the reasoner possesses. No man can permanently sustain the reputation of great ability in argument, without having previously secured a large fund of knowledge as its basis. And we may add that no man can reason well on any given subject, unless he has especially prepared himself in reference to that subject. All reasoning implies a comparison of ideas; or more properly a comparison of propositions, or of facts stated in propositions. Of course, where there is no knowledge on any given subject, where there is no accumulation of facts, there can be no possibility of reasoning; and where the knowledge is much limited, the plausibility and power of the argument will be proportionally diminished.

That many speak on subjects, which are proposed to them, without having made any preparation, cannot be denied; but there is a vast difference between noisy, incoherent declamation, and a well-wrought argument, made up of suitable propositions, following each other with a direct and satisfactory reference to the conclusion. In every case of reasoning, the mind passes successively along the various topics, involved in the argument; and in so doing is governed by the principles of association, as we have already had occasion to notice. But what opportunity can there possibly be for the operation of these principles, when the mind is called to fasten itself upon a subject and to decide upon that subject, without any knowledge of those circumstances, which may be directly embraced in it, or of its relations, and tendencies?

(2) The power of reasoning will depend, in the second place, on the power of attention and memory.

There are some persons, who seem to have no command of the ATTENTION. Every thing interests them slightly, and nothing in a high degree. They are animated by no strong feeling; and enter into no subject, requiring long-continued and abstract investigation, with a suitable intensity of ardour. A defective remembrance of the numerous facts and propositions, which come under review, is the natural consequence of this. And this

necessarily implies a perplexed and diminished power of ratiocination.

(3) A third ground of difference is diversity in the susceptibility of feeling relations. The remark has already been made, (§. 289,) that facts may be accumulated, having close and decisive relations to the points to be proved, but that they can never be so bound together as to result in any conclusion, without a perception or feeling of those relations. But it is well known, whatever it may be owing to, that the relations of objects are much more readily and clearly perceived by some than by others. As, therefore, every train of reasoning implies a succession or series of relative perceptions, a defect in the power of relative suggestion necessarily implies a defect in the reasoning power. And on the other hand, a great quickness and clearness, in the perceptions of relations is necessarily attended, (other things being equal,) with an augmented efficiency of reasoning.

§. 317. *Of habits of reasoning.*

But whatever may be the mental traits, that render, in particular cases, the reasoning power more or less efficient, its efficacy will undoubtedly depend, in a great degree, on Habit.——The effect of frequent practice, resulting in what is termed a HABIT, is often witnessed in those, who follow any mechanic calling, where we find that what was once done with difficulty comes in time to be done with great ease and readiness. The muscles of such persons seem to move with a kind of instinctive facility and accuracy in the performance of those works, to which they have been for a long time addicted.

There is a similar effect of frequent practice in the increase of quickness and facility in our mental operations; and certainly as much so in those, which are implied in reasoning as in any others. If, for instance, a person has never been in the habit of going through geometrical demonstrations, he finds his mind very slowly and with difficulty advancing from one step to another; while on the other hand, a person, who has so often prac-

tised this species of argumentation, as to have formed a habit, advances forward from one part of the train of reasoning to another with great rapidity and delight. And the result is the same in any process of moral reasoning. In the prosecution of any argument of a moral nature, there is necessarily a mental perception of the congruity of its several parts, or of the agreement of the succeeding proposition with that which went before. The degree of readiness in bringing together propositions, and in putting forth such perceptions, will greatly depend on the degree of practice.

§. 318. *Of limitations of the power of reasoning.*

We shall prosecute these general views of the subject of reasoning with the further remark, which has perhaps already suggested itself, that this faculty is essentially and permanently circumscribed and limited in certain respects. From the statements, which have been made, it appears, that the great law of association is directly and very effectively concerned in every process of this kind. It is to this law we are indebted for the introduction of propositions, having a bearing upon the subject of inquiry and debate, and suitable to the occasion. We are no more able by a mere act of volition to secure the existence of applicable and conclusive points in any given argument, than by mere volition to give creation to our thoughts in the first instance.

Persons, therefore, of the most gifted intellect are held in check, and are restrained by the ultimate principles of their mental constitution. These are boundaries, which they cannot pass; and men, who are capable of the greatest efforts in framing arguments, will be no less sensible of this truth, when they carefully examine the course of their thoughts, than others.

§. 319. *Of reasoning in connection with language or expression.*

There is often a want of correspondence between the purely mental process in reasoning and the outward verbal expression of it. When persons are called upon to state

their arguments suddenly and in public debate, they often commit errours, which are at variance with the prevalent opinion of their good sense and mental ability. This is particularly true of men, who are chiefly engaged in the ordinary business of life, or are in any situation where there is a constant call for action. The conclusions, at which such persons arrive, may be supposed to be generally correct, but they frequently find themselves unable to state clearly and correctly to others the process of reasoning, by which they arrived at them.——Oliver Cromwell, the famous English Protector, is said to have been a person, to whom this statement would well apply. The complicated incidents of his life, and the perplexities of his situation, and his great success sufficiently evince, that he possessed a clear insight into events, and was in no respects deficient in understanding; but when he attempted to express his opinions in the presence of others, and to explain himself on questions of policy, he was confused and obscure. His mind readily insinuated itself into the intricacies of a subject, and while he could assert with confidence, that he had arrived at a satisfactory conclusion, he could not so readily describe either the direction he had taken, or the involutions of the journey.—"All accounts, says Mr. Hume, agree in ascribing to Cromwell a tiresome, dark, unintelligible elocution, even when he had no intention to disguise his meaning; yet no man's actions were ever, in such a variety of different cases, more decisive and judicious,"

Such instances are not unfrequent. Mr. Stewart somewhere mentions the case of an English officer, a friend of Lord Mansfield, who had been appointed to the government of Jamaica. The officer expressed some doubts of his competency to preside in the court of chancery. Mansfield assured him, that he would not find the difficulty so great as he imagined,——"Trust, said he, to your own good sense in forming your opinions, but beware of stating the grounds of your judgments. The judgments will probably be right; the arguments will infallibly be wrong."

The perplexity, which is so often experienced by men engaged in active life, in giving a prompt and correct verbal expression to the internal trains of thought, is probably owing in part to a want of practice of that kind, and in part to certain mental habits, which they have been led, from their situation, to form and strengthen. In a thousand emergencies they have been obliged to act with quickness, and at the same time with caution; in other words, to examine subjects, and to do it with expedition. In this way they have acquired exceeding readiness in all their mental acts. The consequence of this is, that the numerous minute circumstances, involved more or less in all subjects of difficult inquiry, are passed in review with such rapidity, and are made in so very small a degree the objects of separate attention, that they vanish, and are forgotten. Hence these persons, although the conclusion to which thay have come be satisfactory, are unable to state to others all the subordinate steps in the argument. Every thing has once been distinctly and fairly before their own minds, although with that great rapidity, which is always implied in a HABIT; but their argument, as stated in words, owing to their inability to arrest and embody all the evanescent processes of thought, appears to others defective and confused.

CHAPTER EIGHTH.

DEMONSTRATIVE REASONING.

§. 320. *Of the subjects of demonstrative reasoning.*

In the remarks, which have hitherto been made, the subject of reasoning has been taken up in the most general point of view. The considerations, that have been proposed, are applicable, in the main, to reasoning in all its forms. But it is necessary, in order to possess a more full and satisfactory conception of this subject, to examine it under the two prominent heads of Moral and Demonstrative.

There are various particulars, in which moral and demonstrative reasoning differ from each other; and the consideration of which will suggest more fully their distinctive nature. Among other things, DEMONSTRATIVE reasoning differs from any other species of reasoning in the subjects, about which it is employed. The subjects are abstract ideas, and the necessary relations among them. Those ideas or thoughts are called abstract, which are representative of such qualities and properties in objects as can be distinctly examined by the mind separate from other qualities and properties, with which they are commonly united. And there may be reckoned, as coming within this class of subjects, the properties of numbers and of geometrical figures; also extension, duration, weight, velocity, forces,

&c., so far as they are susceptible of being accurately expressed by numbers, or other mathematical signs. But the subjects of moral reasoning, upon which we are to remark hereafter more particularly, are matters of fact, including their connection with other facts, whether constant or variable, and all attendant circumstances.—That the exterior angle of a triangle is equal to both the interior and opposite angles, is a truth, which comes within the province of demonstration. That Homer was the author of the Iliad, that Xerxes invaded Greece, &c. are inquiries, belonging to moral reasoning.

§. 321. *Use of definitions and axioms in demonstrative reasoning.*

In every process of reasoning there must be at the commencement of it something to be proved; there must also be some things either known, or taken for granted as such, with which the comparison of the propositions begins. The preliminary truths in demonstrative reasonings are involved in such definitions as are found in all mathematical treatises. It is impossible to give a demonstration of the properties of a circle, parabola, ellipse, or other mathematical figure, without first having given a definition of them. DEFINITIONS, therefore, are the facts assumed, the FIRST PRINCIPLES in demonstrative reasoning, from which by means of the subsequent steps the conclusion is derived.——We find something entirely similar in respect to subjects, which admit of the application of a different form of reasoning. Thus in Natural Philosophy, the general facts in relation to the gravity and elasticity of the air may be considered as first principles. From these principles in Physics are deduced, as consequences, the suspension of the mercury in the barometer, and its fall, when carried up to an eminence.

We must not forget here the use of axioms in the demonstrations of mathematics. Axioms are certain self-evident propositions, or propositions, the truth of which is discovered by intuition, such as the following; "Things, equal to the same, are equal to one another;" From equals take away equals, and equals remain." We generally find

a number of them prefixed to treatises of geometry, and it has been a mistaken supposition, which has long prevailed, that they are at the foundation of geometrical, and of all other demonstrative reasoning. But axioms, taken by themselves, lead to no conclusions. With their assistance alone, it cannot be denied, that the truth involved in propositions susceptible of demonstration, would have been beyond our reach. (See §. 279.)

But axioms are by no means without their use, although their nature may have been misunderstood. They are properly and originally intuitive perceptions of the truth, and whether they be expressed in words, as we generally find them, or not, is of but little consequence, except as a matter of convenience to beginners, and in giving instruction. But those intuitive perceptions, which are always implied in them, are essential helps; and if by their aid alone we should be unable to complete a demonstration, we should be equally unable without them. We begin with definitions; we compare together successively a number of propositions; and these intuitive perceptions of their agreement or disagreement, to which, when expressed in words, we give the name of axioms, attend us at every step.

§. 322. *The opposites of demonstrative reasoning absurd.*

In demonstrations we consider only one side of a question; it is not necessary to do any thing more than this. The first principles in the reasoning are given; they are not only supposed to be certain, but they are assumed as such; these are followed by a number of propositions in succession, all of which are compared together; if the conclusion be a demonstrative one, then there has been a clear perception of certainty at every step in the train. Whatever may be urged against an argument thus conducted is of no consequence; the opposite of it will always imply some fallacy. Thus, the proposition, that the three angles of a triangle are *not* equal to two right angles, and other propositions, which are the opposite of what has been demonstrated, will always be found to be false, and

also to involve an absurdity; that is, are inconsistent with, and contradictory to themselves.

But it is not so in Moral Reasoning. And here, therefore, we find a marked distinction between the two great forms of ratiocination. We may arrive at a conclusion on a moral subject with a great degree of certainty; not a doubt may be left in the mind; and yet the opposite of that conclusion may be altogether within the limits of possibility. We have, for instance, the most satisfactory evidence, that the sun rose to-day, but the opposite might have been true without any inconsistency or contradiction, viz. That the sun did not rise. But on a thorough examination of a demonstrative process, we shall find ourselves unable to admit even the possibility of the opposite.

§. 323. *Demonstrative reasonings do not admit of different degrees of belief.*

When our thoughts are employed upon subjects, which come within the province of moral reasoning, we yield different degrees of assent; we form opinions more or less probable. Sometimes our belief is of the lowest kind; nothing more than mere presumption. New evidence gives it new strength; and it may go on from one degree of strength to another, till all doubt is excluded, and all possibility of mistake shut out.

It is different in demonstrations; the assent, which we yield, is at all times of the highest kind, and is never susceptible of being regarded as more or less. In short, all demonstrations are certain.——But a question first arises, What is certainty? (See §. 64.) And again, What in particular do we understand by that certainty, which is ascribed to the conclusions, to which we are conducted in any process of demonstrative reasoning?

§. 324. *Of the nature of demonstrative certainty.*

In proceeding to answer this inquiry, it is again to be observed, that in demonstrative reasonings we always begin with certain first principles or truths, either known, or taken for granted; and these hold the first place, or are

the foundation of that series of propositions, over which the mind successively passes, until it rests in the conclusion. In mathematics the first principles, of which we here speak, are the definitions.

We begin, therefore, with what is acknowledged by all to be true or certain. At every step there is an intuitive perception of the agreement or disagreement of the propositions, which are compared together. Consequently, however far we may advance in the comparison of them, there is no possibility of falling short of that degree of assent with which it is acknowledged, that the series commenced.——So that demonstrative certainty may be judged to amount to this. Whenever we arrive at the last step or the conclusion of a series of propositions, the mind in effect intuitively perceives the relation, whether it be the agreement or disagreement, coincidence or want of coincidence, between the last step or the conclusion, and the conditions involved in the propositions at the commencement of the series; and, therefore, demonstrative certainty is virtually the same as the certainty of intuition. Although it arises on a different occasion, and is, therefore, entitled to a separate consideration, there is no difference in the degree of the belief.

§. 325. *Of the use of diagrams in demonstrations.*

Mr. Locke has advanced the opinion, that moral subjects are no less susceptible of demonstration, than mathematical. However this may be, we are certainly more frequently required to practice this species of reasoning in the mathematics, than any where else; and in conducting the process, nothing is more common, than to make use of various kinds of figures or diagrams.—The proper use of diagrams, of a square, circle, triangle, or other figure, which we delineate before us, is to assist the mind in keeping its ideas distinct, and to help in comparing them together with readiness and correctness. They are a sort of auxiliaries, brought in to the help of our intellectual infirmities, but are not absolutely necessary; since demonstrative reasoning, wherever it may be found, resembles any

other kind of reasoning, in this most important respect, viz. in being a comparison of our ideas.

In proof that artificial diagrams are only auxiliaries, and are not essentially necessary in demonstrations, it may be remarked, that they are necessarily all of them imperfect. It is not within the capability of the wit and the power of man to frame a perfect circle, or a perfect triangle, or any other figure, which is perfect. We might argue this from our general knowledge of the imperfection of the senses; and we may almost regard it as a matter, determined by experiment of the senses themselves, aided by optical instruments. "There never was (says Cudworth,) a strait line, triangle, or circle, that we saw in all our lives, that was mathematically exact, but even sense itself, at least by the help of microscopes, might plainly discover much uneveness, ruggedness, flexuosity, angulosity, irregularity, and deformity in them."*

Our reasonings, therefore, and our conclusions will not apply to the figures before us, but merely to an imagined perfect figure. The mind can not only originate a figure internally and subjectively, but can ascribe to it the attribute of perfection. And a verbal statement of the properties of this imagined perfect figure is what we understand by a DEFINITION, the use of which in this kind of reasoning in particular has already been mentioned.

§. 326. *Of signs in general as connected with reasoning.*

The statements in the last section will appear the less exceptionable, when it is recollected, that in all cases reasoning is purely a mental process. From beginning to end, it is a succession of feelings. Neither mathematical signs, nor words constitute the process, but are only its attendants and auxiliaries. We can reason without diagrams or other signs employed in mathematics, the same as an infant reasons, before it has learnt artificial language.

When the infant has once put his finger in the fire, he avoids the repetition of the experiment, reasoning in this way, that there is a resemblance between one flame and another, and that what has once caused him pain, will be

*Treatise concerning Immutable Morality, Bk. IV, Ch. 3.

likely under the same circumstances to cause the same sensation. When the infant sees before him some glittering toy, he reaches his hand towards it, and is evidently induced to do so by a thought of this kind, that the acquisition of the object will soon follow the effort of the hand, as it has a similar effort previously made.——Here is reasoning without words; it is purely internal; nevertheless no one will presume to say, that words are not great helps in reasoning. And thus in demonstrative reasoning, although diagrams, and numerical and algebraic signs are assistances, they do not constitute the process; nor can it be even said, that they are indispensably essential to it.

"Some geometricians, (says Buffier, First Truths, Pt. I, Ch. 6,) are led into a palpable errour, in imagining that things demonstrated by Geometry exist, out of their thought, exactly similar to the demonstration formed of them in their mind. They must be quickly sensible of their mistake, if they will but reflect a moment on the perfect globe, the imaginary properties of which are demonstrated in Geometry, though the thing itself has no real existence in nature. Geometry shews nothing of the existence of things, but only what they are, supposing them to exist really such as they are conceived by the mind. And indeed, were all created things existing annihilated, geometry would not lose a single point of its demonstration; the circle would still remain a round figure, of which all the points of circumference would be equally distant from the centre."

§. 327. *Of the influence of demonstrative reasoning on the mental character.*

A considerable skill in demonstrative reasoning is on a number of accounts desirable, although it cannot be denied, that very frequent practice and great readiness in it is not always favorable; so that it seems proper briefly to mention the effects, both propitious and unpropitious, on the mental character.

(1) A frequency of practice in demonstrative reasoning greatly aids in giving one a ready command of his atten-

tion.—In this species of reasoning, the propositions follow each other in such regular order and so closely, and so great is the importance of perceiving the agreement or disagreement of each succeeding one with that, which goes before; that a careless, unfixed, and dissipated state of the mind seems to be utterly inconsistent with carrying on such a process with any sort of success to the conclusion. As, therefore, the strictest attention is here so highly necessary, the more a person subjects himself to this discipline, the more ready and efficient will be the particular application of the mind, to which we give that name. And we often find distinguished individuals in political life and in the practice of the law, who are desirous of holding their mental powers in the most prompt and systematic obedience, imposing on themselves exercises in geometry and algebra for this purpose.

(II) This mode of reasoning accustoms one to care and discrimination in the examination of subjects.——In all discussions, where the object is to find out the truth, it is necessary to take asunder all the parts, having relation to the general subject, and bestow upon them a share of our consideration. And in general we find no people more disposed to do this than mathematicians; they are not fond of reasoning as Mr. Locke expresses it, in the lump, but are for going into particulars, for allowing every thing its due weight and nothing more, and for resolutely throwing out of the estimate all propositions, which are not directly and truly to the point.—It must further be said, as a general remark closely connected with what has just been observed, that those departments of science, which require demonstrative reasoning, are promotive of a characteristic of great value,—a love of the truth.

(III) Demonstrative reasoning gives to the mind a greater grasp or comprehension. This result, it is true, will not be experienced in the case of those, who have merely exercised themselves in the study of a few select demonstrations; it implies a familiarity of the mind with long and complicated trains of deductions. A thorough mathematician, who has made it a business to exercise himself

in this method of reasoning, can hardly have been otherwise than sensible of that intellectual comprehension, or length and breadth of survey, which we have in view; since one demonstration is often connected with another, much in the same way as the subordinate parts of separate demonstrations are connected with each other; and he, therefore, finds it necessary, if he would go on with satisfaction and pleasure, to gather up and retain, in the grasp of his mind, all the general and subordinate propositions of a long treatise.

§. 328. *Further considerations on the influence of demonstrative reasoning.*

But on the other hand, there are some results of a very great attention to sciences, which require the exclusive application of demonstrative reasoning, of a less favourable kind.

(I) It has been thought among other things, that this form of reasoning, when carried to a great length, has a tendency to render the mind mechanical. That is, while it increases its ability of acting in a given way, it diminishes the power of invention, and prevents its striking out into a new path, different from that, which it has been in the habit of going over. And hence it is, that men of the strictest virtue and the most powerful intellect have sometimes discovered an unexpected weakness, and made extraordinary mistakes, when placed in certain new situations.——We may illustrate our meaning by a single instance, although perhaps not one of the strongest kind. The celebrated Turgot, who combined the purest moral sentiments with the rarest intellectual endowments, was what may be termed a mathematical politician. History has recorded the result. When the king of France called him to direct the political concerns of the French empire, he decidedly failed, where half the talents and integrity had firmly held the helm amid political tempests. That great and virtuous mind, when called away from the abstractions of science to deal with the realities of life and mankind, which prejudice and passion, weakness and

power, interest and suffering presented before him, found too late, that we cannot estimate the intellect as we can estimate the arc of a circle, and that the calculus, which can measure the flight and eccentricities of the stars, may not succeed in ascertaining the momentum and the obliquities of human nature.

(II) An exclusive culture of demonstrative reasoning nourishes a spirit of scepticism; or perhaps we may say, diminishes the power of belief. The exclusive mathematician has been accustomed to yield his assent to demonstration only; and it is but natural, that he should find some difficulty in being satisfied with any lower degree of evidence. This disposition to doubt will be, in some measure, experienced, even in the transition from pure to mixed mathematics; at least there will be an absence of that full and delighted satisfaction, which had hitherto been enjoyed. Still more will it be felt, when he is called upon to judge of events, and duties, and actions of common life, which do not admit of the application of demonstration.——In a word, it has been supposed to unfit the mind in a considerable degree for accurate discriminations as to moral evidence on all subjects whatever, where that species of evidence is alone admissible; and also for fair and correct judgments in matters of taste.

Such, on the whole, being the result of an exclusive attention to sciences, which admit of demonstration alone, a restricted pursuit of them is all, that can be safely recommended. In making this remark, however, it is not meant, that we would absolutely set limits to the prosecution of them, but would only propose, that other modes of mental discipline should be prosecuted at the same time. Those who aim at a perfect education, will not "canton out to themselves a little Goshen in the intellectual world," which is to receive all their labours, and leave the rest of the vast field of the mind to neglect, but will bestow a suitable share of culture on every part of it.

CHAPTER NINTH.

MORAL REASONING.

§. 329. *Of the subjects and importance of moral reasoning.*

MORAL REASONING, which is the second great division or kind of reasoning, concerns opinions, actions, events &c.; embracing in general those subjects, which do not come within the province of demonstrative reasoning. The subjects, to which it relates, are often briefly expressed by saying, that they are *matters of fact*; nor would this definition, concise as it is, be likely to give an erroneous idea of them.——Skill in this kind of reasoning is of great use in the formation of opinions concerning the duties, and the general conduct of life. Some may be apt to think, that those, who have been most practised in demonstrative reasoning, can find no difficulty in adapting their intellectual habits to matters of mere probability. This opinion is not altogether well founded, as we have seen in the preceding chapter. Although that species of reasoning has a favourable result in giving persons a command over the attention, and in some other respects, whenever exclusively employed it has the effect in some degree to disqualify them for a correct judgment on those various subjects, which properly belong to moral reasoning.——The last, therefore, which has its distinctive name from the primary signification of the Latin MORES, viz. *manners, customs*, &c. requires a separate consideration.

§. 330. *Of the nature of moral certainty.*

Moral reasoning causes in us different degrees of assent, and in this respect differs from demonstrative. In demonstration there is not only an immediate perception of the relation of the propositions compared together; but in consequence of their abstract and determinate nature, there is also a knowledge or absolute certainty of their agreement and disagreement. In moral reasoning the case is somewhat different.——In both kinds we begin with certain propositions, which are either known or regarded as such. In both there is a series of propositions successively compared. But in moral reasoning, in consequence of the propositions not being abstract and fixed, and therefore often uncertain, the agreement or disagreement among them is in general not said to be known, but *presumed*; and this presumption may be more or less, admitting a great variety of degrees. While, therefore, one mode of reasoning is attended with knowledge; the other can properly be said to produce in most cases only judgment or opinion.—— But the probability of such judgment or opinion may sometimes arise so high, as to exclude all reasonable doubt. And hence we then speak, as if we possessed certainty in respect to subjects, which admit merely of the application of moral reasoning. Although it is possible, that there may be some difference between the belief attendant on demonstration, and that produced by the highest probability, the effect on our feelings is at any rate essentially the same. A man, who should doubt the existence of the cities of London and Pekin, although he has no other evidence of it than that of testimony, would be considered hardly less singular and unreasonable, than one, who might take it into his head to doubt of the propositions of Euclid. It is this very high degree of probability, which we term *moral certainty*.

§. 331. *Of reasoning from analogy.*

Moral reasoning admits of some subordinate divisions; and of these, the first to be mentioned is reasoning from *analogy*.—The word, analogy, is used with some vagueness,

but in general denotes a resemblance, either greater or less.—Having observed a consistency and uniformity in the operations of the physical world, we are naturally led to presume, that things of the same nature will be affected in the same way, and will produce the same effects; and also that the same or similar effects are to be attributed to like causes. ANALOGICAL REASONING, therefore, is that mental process, by which unknown truths or conclusions are inferred from the resemblances of things.

The argument, by which Sir Isaac Newton establishes the truth of universal gravitation, is of this sort. He proves, that the planets in their revolutions are deflected towards the sun in a manner precisely similar to the deflection of the earth towards the same luminary; and also that there is a similar deflection of the moon towards the earth, and of a body projected obliquely at the earth's surface towards the earth's centre. Hence he infers by analogy, that all these deflections originate from the same cause, or are governed by one and the same law, viz. *the power of gravitation*.

This method of reasoning is applicable to the inquiry, Whether the planets are inhabited; and furnishes the sole ground for the indulgence of such a supposition. We observe a resemblance in certain respects between Mars, Jupiter, Saturn, and other planets, and the earth. They all revolve around the sun, as the earth does, and all derive light from that source. Several of them are ascertained to revolve on their axis, and, consequently, must have a succession of day and night. Some of them have moons, and all are subject to the law of gravitation. From these various similitudes we draw the conclusion by analogy, that those planets must be inhabited, like the earth.

There are a variety of subjects, both speculative and practical, in respect to which we may reason in this way; and sometimes with considerable satisfaction. And among others, this method of reasoning finds a place in the arguments of persons in the practice of the law. An attorney, for instance, advocates a case, which does not fall within the provisions

of existing statutes, and for which he finds in his authorities no exact precedent. He is, therefore, under the necessity of ascertaining, as far as possible, the analogy or resemblance between this case and others, which are given, and have been decided upon. And he has here a favourable opportunity for the exhibition of his research and discrimination.——A considerable part of the argumentation among pleaders at the bar is employed in urging various analogies of this sort. It is the business of the court in such instances to adjust and compare them together, and allow them their due weight. In doing this their discernment and integrity are called into exercise; for sometimes a small circumstance, and perhaps one, which the pleader has labored to involve in obscurity, will disclose an essential distinction between the case in hand, and that on the file of precedents, to which it has been likened.

§. 332. *Caution to be used in reasoning from analogy.*

The last remark leads us to observe, that much care is necessary in arguments drawn from this source, especially in scientific investigations; and they are in all cases to be received with some degree of distrust. The ancient anatomists are an instance of precipitate reasoning from analogy. Being hindered by certain superstitions from dissecting the bodies of men, they endeavoured to obtain the information they wanted, by the dissection of those animals, whose internal structure was supposed to come nearest to that of the human body. In this way they were led into a variety of mistakes, which have been detected by later anatomists. It does not follow, because things resemble each other in a number of particulars, that this resemblance will be found in all others; and we are, therefore, always to consider ourselves in danger of pushing the supposition of similitude too far.

The proper use of analogical reasoning seems to be, in all scientific inquiries, to illustrate and confirm truths, which are susceptible of proof from other sources of evidence. A happy instance of this use of it is the work of

Bishop Butler, entitled, "*The analogy of Religion, natural and revealed, to the Constitution and Course of nature.*"——It is not the object of the writer to prove the truth of religion, either natural or revealed, but to answer some objections, which may be brought against its principles. And this he does by proving, that the same objections exist to the providence of God in the natural world. There is an analogy or resemblance in the two; and if the objections, which are brought, will reject him from the authorship of what we term religion, either natural or revealed, they will dethrone him also from all direction in the ordinary economy of nature.

§. 333. *Of reasoning by induction.*

We now come to another method of moral reasoning, viz. by induction. *Inductive reasoning* is the inferring of general truths from particular facts, that have fallen under our observation. Our experience teaches us, that nature is governed by uniform laws; and we have a firm expectation, (whether it be an original principle of our constitution or whatever may be the origin of it,) that events will happen in future, as we have seen them happen in times past. With this state of mind we are prepared to deduce inferences by induction.

When a property has been found in a number of subjects of the same kind, and nothing of a contradictory nature appears, we have the strongest expectation of finding the same property in all the individuals of the same class; in other words, we come to the conclusion that the property is a general one. Accordingly, we apply a magnet to several pieces of iron; we find in every instance a strong attraction taking place; and we conclude, although we have made the experiment with only a small number of the masses of iron actually in existence, that it is a property of iron to be thus affected by that substance, or that all iron is susceptible of magnetical attraction. This is a conclusion drawn by induction.

The belief, which attends a well conducted process of

inductive reasoning, bears a decided character ; it is moral probability of the highest kind, or what is sometimes termed moral certainty ; and is at least found to be sufficient for all practical purposes. We obtain all the general truths, relating to the properties and laws of material objects in this way.

And we thus not only acquire a knowledge of the general nature of material objects, but apply the same inductive process also in the investigation of laws, which govern the operations of the mind. It is by experience or observing what takes place in a number of individuals, that we are able to infer the general law of association viz., When two or more ideas have existed in the mind in immediate succession, they are afterwards found to be mutually suggested by each other. It is the same in ascertaining other general laws.

The method of induction, which is recommended by Lord Bacon, as one of the most important aids in the search after truth, is employed not only in ascertaining the general facts both of physical and intellectual nature, but is employed also in the formation of such practical rules and maxims, as are of use in the common concerns of life.

§. 334. *Of combined or accumulated arguments.*

When a proposition in geometry is given to be demonstrated, it sometimes happens that two or more solutions may be offered, leading to the same end. The theorem or the problem is one and the same, as also the conclusion; but there may be more than one train of reasoning, more than one series of intermediate steps, connecting the proposition, which is to be investigated, with the result. But as the conclusion in each of these different cases is certain, it does not strengthen it, although it may gratify curiosity, to resort to a different and additional process.

It is not thus in moral reasoning. The great difference between the two kinds of reasoning, as before observed, is not so much in the mental process, as in the subjects, about which they are employed. Now as the subjects in

moral reasoning are not of a purely abstract nature, and are therefore often attended with uncertainty, our belief, when we arrive at the conclusion, is not always of the highest kind. More frequently it is some inferiour degree of probability. Hence in any moral inquiry the more numerous the series of arguments, which terminates in a particular conclusion, the stronger will be our belief in the truth of that conclusion.

Thus we may suppose a question to arise, Whether the Romans occupied the island of Great Britain at some period previous to the Saxon conquest? In reference to this inquiry a number of independent arguments may be brought forward; (1) The testimony of the Roman historians; (2) The remains of buildings, roads, and encampments, which indicate a Roman origin; (3) The coins, urns, &c. which have been discovered.—Although these arguments are independent of each other, they all bear upon the same conclusion; and being combined together, they very essentially increase the strength of our belief.

CHAPTER TENTH.

PRACTICAL DIRECTIONS IN REASONING.

§. 335. *Practical rules in reasoning required by the frequency of its applications.*

VARIOUS directions have been given by writers on Logic, (which it may be remarked here, is only another name for whatever concerns the nature, kinds, and applications of reasoning.) the object of which is to secure the more prompt, accurate, and efficient use of the reasoning power. It is but natural to suppose, that some of these dialectical rules are greater, and others of less value. Such as appeared to be of the least questionable importance are brought together, and explained in this chapter; nor will this occasion any surprize, when it is recollected, that it has been the object of this Work throughout, not only to ascertain what the mental operations are, but by practical suggestions from time to time, to promote what is of a good, and prevent what is of a hurtful tendency in such operations.

The directions now referred to have of course a more intimate connection with Moral, than with Demonstrative reasoning; but this is a circumstance, which enhances, rather than diminishes their worth. The occasions, which admit and require the application of moral reasoning, being inseparable from the most common occurrences and

exigencies of life, are much more numerous, than those of demonstrative reasoning. It is undoubtedly one great object of reasoning, (particularly of moral reasoning,) not only to discover truth for ourselves, but to communicate it to others; in other words, to produce in the minds of others the conviction, which exists in our own. It is unnecessary to attempt to show, how often occasions, suitable to such an object, occur; and still less to indicate by any formal statements, how much the importance of the reasoning power is increased by such frequency of its applications. There are not unfrequently formal and vigorous discussions, not only in the common intercourse and in relation to the common business of life, but they are opened and maintained in the schools of learning, in courts of justice, in literary and philosophical societies, in ecclesiastical councils, and among the advocates of adverse systems in morals, politics, and religion. Especially do legislative assemblies, which, in later times, have so rapidly multiplied, afford frequent opportunities for the efforts of the honest dialectician. He has there great motives, operating upon him, and calling him to put forth the noblest powers of argument; such as the establishment of justice, the protection of the oppressed, the preservation of freedom, a nation's welfare, growth, and glory. Reasoning is the great instrument, which is wielded in these conflicts; and we are persuaded, that any suggestions, which may tend to regulate its exercise and secure its appropriate results, will be acceptable.

§. 336. (1) *Of being influenced by a desire of the truth.*

The first direction in relation to reasoning, which will be given, concerns the feelings, with which it is proper to be animated.——In all questions, which admit of discussion, and on which we find ourselves at variance with the opinions of others, we are to make truth our object. A desire of the truth is the first qualification in such inquiries. Guided by this internal light, the inquirer will find his path consistent amid all its windings, and though

it may pass through dark shades and rough declivities, terminating at last in green fields and pleasant streams, where he shall be crowned with quietness and with honour.

The opposite of a desire of the truth is a wish to decide the subject of dispute in one way rather than another. The foundation of such a preference of one result to another are in general the prejudices of interest and passion; and these are the great enemies of truth. Whenever we are under their influence, we form a different estimation of testimony and of other sources of evidence from what we should do under other circumstances; and at such times they can hardly fail to lead us to false results.

We have an illustration of the effects of a disputatious spirit, unconnected with any desire of the truth, among the Schoolmen. No persons seem to have been more skilled in the technical forms of argument. To dispute with readiness and skill was considered among them a part of education so valuable, that all possible pains were taken in securing this mental accomplishment. But the acquisition of truth did not form any prominent part of their plan. The subjects, about which they debated, were frivolous; and the spirit, which animated them, exceedingly captious and disingenuous. The testimony of John of Salisbury, a learned man of the Scholastic ages, confirms this. He visited Paris, in the year 1137, and attended upon the lectures of the famous Abelard and other masters, and made great advancements in learning. A number of years afterwards he returned to the place of his early studies, in order to confer with his former associates, who yet remained there, on the topics, on which they had been used to converse.

"I found them (says he) the same men, in the same place; nor had they advanced a single step towards resolving our ancient questions, nor added a single proposition, however small, to their stock of knowledge. Whence I inferred, what indeed it was easy to collect, that dialectic

studies, however useful they may be when connected with other branches of learning, are in themselves barren and useless."——It may be briefly added, that the above mentioned rule is important to be observed on all occasions of reasoning whatever, but particularly in public debate; because, in addition to the influence of general interest and passion already alluded to, the presence of others and the love of victory over an opponent too often induce men to forget or to disregard the claims, which truth is always entitled to enforce.

§. 337. (II.) *Care to be used in correctly stating the subject of inquiry and discussion.*

Another rule in the prosecution of an argument is, that the question under debate is to be fairly and correctly stated. Relying solely on the justice of our cause, and animated by a desire of the truth, we should be unwilling to allow any artifice here.—The matter in controversy may be stated in such a way as to include, in the very enunciation of it, something taken for granted, which must necessarily lead to a decision in favour of one of the opponents. But this amounts to begging the question, a species of fallacy or sophism, upon which we shall again have occasion to remark.——Sometimes the subject of discussion is stated so carelessly, that the true point at issue is wholly left out. It may be proper, therefore, in many cases to adopt the practice of special pleaders, and first to ascertain all the points, in which the opponents agree, and those in which they differ. And then they can hardly fail of directing their arguments, to what is truly the subject of contention.

In order that there may not be a possibility of misunderstanding here, dialecticians should aim to have clear ideas of every thing stated in the question which, has an intimate connection with the point at issue. That is, subordinate parts of the question, and even particular words are to be examined. If the statement affirm or deny any thing in regard to the qualities or properties of material bodies, it is incumbent upon us to possess as clear ideas

as possible, both of the object in general, and of those properties or qualities in particular. Similar remarks will apply to other subjects of inquiry of whatever kind.

As an illustration of these directions, we will suppose, that the point in dispute is, Whether civil government originates in all cases from the people? Here it is necessary to understand what is meant by the word government; that is, whether it is meant to include in the term all the different kinds of public authority, such as absolute, monarchical, and aristocratical, as well as republican, and to give it the most general meaning. The reason of this is, that some might be inclined to say, that purely absolute governments, such as that of the Ottoman Porte, are no governments at all, but merely usurpations or tyranny, and, therefore, ought to be excluded from the inquiry. The meaning of the word, originate, is also to be looked into. We are to know what constitutes a beginning or origin in this case; and particularly whether the term, as here used, implies and admits the validity of a tacit agreement, or not. In the inquiry, it will necessarily be admitted, that many governments exist without any written or express agreement on the part of the people; and still it may be urgently contended, that they have originated by virtue of a tacit agreement, provided it be granted, that there is any such thing as a tacit agreement, which is binding, and which, therefore, can be a ground of existence or origin.——The taking of such precautions would often have prevented great waste of words, as well as undue indulgence of irritable feelings; and would have often led more directly and surely to the discovery of truth.

§. 338. (III) *Consider the kind of evidence applicable to the subject.*

As one subject clearly admits of the application of one species of evidence, while another as clearly requires evidence of a different kind, we are thence enabled to lay down this rule, viz., We are to consider what kind of evidence is appropriate to the question under discussion.

When the inquiry is one of a purely abstract nature

and all the propositions, involved in the reasoning, are of the same kind then we have the evidence of intuition or intuitive perception; and the conclusion, for reasons already mentioned, is certain.

In the examination of the properties of material bodies, we depend originally on the evidence of the senses; which gives a character and strength to our belief according to the circumstances, under which the objects are presented to them. In judging of those facts in the conduct of men, which have not come under our own observation, we rely on testimony. This source of belief causes probability in a greater or less degree, according as the testimony is from one or more, given by a person, who understands the subject, to which it relates, or not, &c.—And again, some subjects admit of the evidence of induction, and in respect to others we have no other aids, than the less authoritative reasonings from analogy. In other cases, the evidence is wholly made up of various incidental circumstances, which are found to have relation to the subject in hand, and which affect the belief in different degrees and for various causes.

And hence as the sources of belief, as well as the belief itself, have an intimate connection with the subject before us, they ought to be taken into consideration. The evidence should be appropriate to the question. But if the question admit of more than one kind of evidence, then all are entitled to their due weight.

§. 339. (IV.) *On excluding all unmeaning propositions.*

Deeply interested in the subject of discussion, and bent not so much upon putting down your opponent as the discovery of the truth, avoid the introduction of propositions, which are destitute of meaning. A proposition is in general said to be without meaning when it is so stated that all the information, it gives as a whole, is already contained in one of the parts, viz., the subject.

The first class, answering to this view, may be termed IDENTICAL PROPOSITIONS.—The proposition, WHATEVER IS, IS, may be given as an instance. When examined, it will

be found to teach us nothing; and although it was in the times of the Scholastic philosophy, employed as an axiom, and thought to be of much consequence in aiding as a medium in argument, the proof which it brings, in any case whatever, amounts to no more than this, that the same word may with certainty be predicated of itself. When we say that man is man, or that blue is blue, we receive as much information and as valuable, as when we say, that whatever is, is; that is, we know no more afterwards than we did before the enunciation of the proposition. The same of all, which belong to this class.

There is a second class of unmeaning propositions, slightly differing in form, from the above, but are the same in substance, viz., THOSE, WHERE A PART ONLY OF THE COMPLEX IDEA IS PREDICATED OF THE WHOLE.

Hence to this class belong all those, where the genus is predicated of the species; when for instance, it is said, that lead is a metal. If we know the meaning of the term, lead, which is the subject of the proposition, we of course know, that it is a metal. The propositions, that gold is yellow, and that man is rational, are of this kind. We are supposed to know the meaning of the separate terms of these propositions; one of these terms is the subject; and this evidently involves and implies the meaning of the proposition, taken as a whole. When, on the contrary we are told, that man has a notion of God, or that man is cast into sleep by opium, we then learn something, since the ideas here expressed are not contained in the word, man.——When a single word is employed with vagueness and inconsistency, it is rightly considered to be a proper subject of criticism, and may fairly be objected to; and the same liberty, and for the same reasons, may properly be taken with unmeaning propositions, which have the appearance of carrying us onward in the investigation of a subject, but which, when truly estimated, leave us no wiser, than before we heard them.

§. 340. (V.) *Avoid the introduction of acknowledged and common-place propositions.*

There is another rule, relating to the practice of reasoning, which is of a like nature with the last mentioned viz. Not to burden the argument with acknowledged and common-place propositions.——The common feelings and experience of mankind have so firmly established many things as true, that the great mass would no more think of controverting them, than would the geometrician of questioning the truth of axioms. These propositions differ from those, considered in the last section, in having meaning, and perhaps important meaning. But it ought not to be forgotten, that we are supposed to reason with those, who have had some experience and possess a share of common sense ; and who need not to be reminded of truths, however significant, which are already as familiar to them as the letters of their mother tongue. If the question depend directly upon such truths, then there is no need of discussion ; and if it do not, then it is certainly a prejudice to our cause to let them take up our attention, while there are other points of moment more closely connected with its issue. A studious enumeration and arrangement of common-place statements offends the hearer or reader, because it intimates, that we consider them more ignorant, than they will be willing to admit ; and besides, it causes fatigue and listlessness. But a worthy and powerful dialectician, while he sedulously seeks the truth, is always found to observe two things ; first, to keep down all feelings of disgust and prejudice in the minds of his opponents and others; and second, to preserve their attention interested and fully alive. This last can be done only by presenting the select and prominent views of a subject, by investing them with every appropriate attraction, and urging them home by awakened and constant appeals.

§. 341. (VI.) *Reject the aid of false arguments or sophisms.*

There is a species of false reasoning, which we call a

SOPHISM. A sophism is an argument, which contains some secret fallacy, under the general appearance of correctness. The aid of such arguments, which are intended to deceive, and are inconsistent with a love of the truth, should be rejected.

(1) IGNORATIO ELENCHI, or misapprehension of the question, is one instance of the sophism. It exists, when the arguments advanced do not truly apply to the point in debate. Let it be supposed, that some person has founded a literary institution. The question is, Whether he be a man of learning, a sholar? It is argued, that he is, in consequence of having founded a seminary for scientific purposes. Here we may deny the connection between the premises and the conclusion, although the argument is somewhat specious; because we know it to be the fact, that many men of but small information have been the patrons of science. That is, an argument is applied, which, it is supposed, would not have been brought forward, if there had been a proper understanding of the import and spirit of the question, and of what was justly applicable to it.

(2) PETITIO PRINCIPII, or begging of the question, is another instance of sophism. This sophism is found, whenever the disputant offers, in proof of a proposition, the proposition itself in other words. The following has been given as an instance of this fallacy in reasoning;—A person attempts to prove, that God is eternal, by asserting, that his existence is without beginning and without end. Here the proof, which is offered, and the proposition itself, which is to be proved, are essentially the same.—When we are told, that opium causes sleep, because it has a soporific quality, or that grass grows by means of its vegetative power, the same thing is repeated in other terms.—This fallacy is very frequently practised; and a little care in detecting it would spoil many a fine saying, and deface many a elaborate argument.——What is called *arguing in a circle* is a species of sophism very nearly related to the above. It consists in making two propsitions reciprocally prove each other.

(3) NON CAUSA PRO CAUSA, or the assignation of a false cause.—People are unwilling to be thought ignorant; rather than be thought so, they will impose on the credulity of their fellow men, and sometimes on themselves, by assigning false causes of events. Nothing is more common, than this sophism among illiterate people; pride is not diminished by deficiency of learning, and such people, therefore, must gratify it by assigning such causes of events as they find nearest at hand. Hence, when the appearance of a comet is followed by famine or a war, they are disposed to consider it as the cause of those calamities. If a person have committed some flagrant crime, and shortly after suffer some heavy distress, it is no uncommon thing to hear the former assigned, as the direct and the sole cause of the latter.—This was the fallacy, which historians have ascribed to the Indians of Paraguay, who supposed the baptismal ceremony to be the cause of death, because the Jesuit missionaries, whenever opportunity offered, administered it to dying infants, and to adults in the last stage of disease.

(4) Another species of sophistry is called FALLACIA ACCIDENTIS.——We fall into this kind of false reasoning, whenever we give an opinion concerning the general nature of a thing from some accidental circumstance. Thus, the Christian religion has been made the pretext for persecutions, and has in conquence been the source of much suffering; but it is a sophism to conclude, that it is, on the whole, not a great good to the human race, because it has been attended with this perversion. Again, if a medecine have operated in a particular case unfavourably, or in another case, have operated very favourably, the universal rejection or reception of it, in consequence of the favourable or unfavourable result in a particular instance, would be a hasty and fallacious induction of essentially the same sort. That is, the general nature of the thing is estimated from a circumstance, which may be wholly accidental.

§. 342 (VII.) *On the sophism of estimating actions and character from the circumstance of success merely.*

The foregoing are some of the fallacies in reasoning, which have found a place in writers on Logic. To these might be added the fallacy or sophism, to which men are obviously so prone, of judging favourably of the characters and the deeds of others, from the mere circumstance of success. Those actions, which have a decidedly successful termination, are almost always applauded, and are looked upon as the result of great intellectual forecast; while not less frequently actions, that have an unsuccessful issue, are not only stigmatized as evil in themselves, but as indicating in their projector a flighty and ill-balanced mind.—The fallacy, however, does not consist in taking the issues or results into consideration, which are undoubtedly entitled to their due place in estimating the actions and characters of men, but in too much limiting our view of things, and forming a favourable or unfavourable judgment from the mere circumstance of good or ill success alone.

While there is no SOPHISM, more calculated to lead astray and perplex, there is none more common than this; so much so, that it has almost passed into a proverb, that a hero must not only be brave, but *fortunate*. Hence it is, that Alexander is called the Great, because he gained victories, and overran kingdoms; while Charles XII of Sweden, who the most nearly resembles him in the characteristics of bravery, perseverance, and chimerical ambition, but had his projects cut short at the fatal battle of Pultowa, is called a madman.

"Machiavel has justly animadverted, (says Dr. Johnson) on the different notice taken by all succeeding times, of the two great projectors, Cataline and Cæsar. Both formed the same project, and intended to raise themselves to power by subverting the commonwealth. They pursued their design perhaps with equal abilities and equal virtue; but Cataline perished in the field, and Cæsar returned from Pharsalia with unlimited authority; and from that time, every monarch of the earth has thought himself honoured

by a comparison with Cæsar; and Cataline has never been mentioned, but that his name might be applied to traitors and incendiaries."

In the same Essay* he happily illustrates this subject by a reference to the discovery of America, in the following terms.—"When Columbus had engaged king Ferdinand, in the discovery of the other hemisphere, the sailors, with whom he embarked in the expedition, had so little confidence in their commander, that after having been long at sea looking for coasts, which they never expected to find, they raised a general mutiny, and demanded to return. He found means to sooth them into a permission to continue the same course three days longer, and on the evening of the third day descried land. Had the impatience of his crew denied him a few hours of the time requested, what had been his fate but to have come back with the infamy of a vain projector; who had betrayed the king's credulity to useless expenses, and risked his life in seeking countries that had no existence? how would those that had rejected his proposals, have triumphed in their acuteness; and when would his name have been mentioned, but with the makers of portable gold and malleable glass?"

§. 343. (VIII.) *On the use of equivocal terms and phrases.*

It is a further direction of much practical importance, that the reasoner should be careful, in the use of language, to express every thing with plainness and precision; and especially never attempt to prejudice the cause of truth, and snatch a surreptitious victory by the use of an equivocal phraseology. No man of an enlarged and cultivated mind can be ignorant, that multitudes of words in every language admit of diversities of signification. There are to be found also in all languages many words, which sometimes agree with each other, and sometimes differ in signification, according to the connection in which they appear, and their particular application. There is, therefore, undoubtedly an opportunity, if any should be disposed to embrace it, of employing equivocal terms, equivocal phrases, and perplexed and mysterious

* See the Adventurer. No 99.

combinations of speech, and thus hiding themselves from the penetrating light of truth, under cover of a mist of their own raising.

No man, whose sole object is truth and justice, will resort to such a discreditable subterfuge. If in reasoning he finds himself inadvertently employing words of an equivocal signification, it will be a first care with him to guard against the misapprehensions, likely to result from that source. He will explain so precisely the sense, in which he uses the doubtful terms as to leave no probability of cavilling and mistake.

And besides the invaluable reputation of a man of honour and justice, he will in this way realize results in respect to his own intellectual character of the most beneficial nature. The practice of verbal criticism, as it has been called, (that is, of discriminating readily and accurately the meaning of words,) will result in a HABIT, giving to the dialectician a vast power over his opponent, who has not been trained to the making of such nice discriminations. There will be a keenness of intellectual perception, which, while it helps to untie the perplexities of language, at the same time resolves the perplexities of thought; separating meaning from meaning, and dividing truth from falsehood in those cases, where at first sight it appeared to be impossible. But it is a power, which cannot be possessed without a laborious acquaintance with the purest writers and the ablest reasoners in a language; together with a systematic and philosophic study of its origin, idioms, and general forms. And while it may be employed to the most beneficial purposes, it is far too formidable to be entrusted in the management of any one, who is not under the influence of that moral rectitude and that love of the truth, which have been so repeatedly insisted on.

§. 344. (IX.) *Of adherence to our opinions.*

Whenever the rules laid down have been followed, and conclusions have been formed with a careful and candid regard to the evidence presented, those opinions are to be asserted and maintained with a due degree of confidence. It would evince an unjustifiable weakness to be driven

from our honest convictions by the effrontery, or even by the upright, though misguided zeal of an opponent. Not that a person is to set himself up for infallible, and to suppose that new accessions of evidence are impossible, or that it is an impossibility for him to have new views of the evidence already examined. But a suitable degree of stability is necessary in order to be respected and useful; and, in the case supposed, such stability can be exhibited without incurring the charge, which is sometimes thrown out, of doggedness and intolerance.

It is further to be observed, that we are not always to relinquish judgments, which have been formed in the way pointed out, when objections are afterwards raised, which we cannot immediately answer. The person thus attacked can, with good reason, argue in this way; I have once examined this subject carefully and candidly; the evidence, both in its particulars and in its multitude of bearings, has had its weight; many minute and evanescent circumstances were taken into view by the mind, which have now vanished from my recollection; I, therefore, do not feel at liberty to alter an opinion thus formed, in consequence of an objection now brought up, which I am unable to answer; but choose to adhere to my present judgment, until the whole subject, including this objection, can be re-examined.——This reasoning would in most cases be correct, and would be entirely consistent with that love of truth and openness to conviction, which ought ever to be maintained.

§. 345. *Effects of debating for victory instead of truth.*

By way of suppporting the remarks under the first rule, we here introduce the subject of contending for victory merely. He, who contends with this object, takes every advantage of his opponent, which can subserve his own purpose. For instance, he will demand a species of proof or a degree of proof, which the subject in dispute does not admit; he gives, if possible, a false sense to the words and statements, employed by the other side; he questions facts, which he himfelf fully believes and every body else, in the expectation that the opposite party is not

furnished with direct and positive evidence of them. In a word wherever an opening presents, he takes the utmost advantage of his opponent, however much against his own internal convictions of right and justice.

Such a course, to say nothing of its moral turpitude, effectually unsettles that part of our mental economy, which concerns the grounds and laws of belief. The practice of inventing cunningly devised objections against arguments, known to be sound, necessarily impairs the influence, which such arguments ought ever to exert over us. Hence the remark has been made with justice, that persons, who addict themselves to this practice, frequently end in becoming sceptics. They have so oft[illegible] and apparently overthrown what they fel[illegible] they at last question the existence of any [illegible] belief in the human constitution, and be[illegible] every thing.

This effect, even when there is an undoubt[illegible] regard for the truth, will be found to follow from habits of ardent disputation, unless there be a frequent recurrence to the original principles of the mind, which relate to the nature and laws of belief. The learned Chillingworth is an instance. The consequences, to which the training up of his vast powers to the sole art of disputation finally led, are stated by Clarendon.—"Mr. Chillingworth had spent all his younger time in disputations and had arrived at so great a mastery, that he was inferiour to no man in those skirmishes; but he had with his notable perfection in this exercise, contracted such an irresolution and habit of doubting, that by degrees he grew confident of nothing."

"Neither the books of his adversaries nor any of their persons, though he was acquainted with the best of both, had ever made great impression on him. All his doubts grew out of himself, when he assisted his scruples with all the strength of his own reason; and was then too hard for himself. But finding as little quiet and repose in those victories, he quickly recovered by a new appeal to his own judgment; so that he was in truth, in all his sallies and retreats, his own convert."

CHAPTER ELEVENTH.

OF IMAGINATION.

346. *Definition of the power of imagination.*

IMAGINATION is a complex exercise of the mind, by means of which various conceptions are combined together, so as to form new wholes. The conceptions have properly enough been regarded as the materials, from which the new creations are made ; but it is not until after the existence of those mental states, which are implied in imagination, that they are fixed upon, detained, and brought out from their state of singleness into happy and beautiful combinations.

Our conceptions have been compared to shapeless stones, as they exist in the quarry, which "require little more than mechanic labour to convert them into common dwellings, but that rise into palaces and temples only at the command of architectural genius." That rude, and little more than mechanic effort, which converts the shapeless stones of the quarry into common dwellings, may justly be considered, when divested of its metaphorical aspect, a correct representation of this mental property, as it exists among the great mass of mankind ; while the architectural genius, which creates palaces and temples, is the well-furnished and sublime imagination of poets, painters, orators, &c.

Imagination is a complex mental operation; implying the exercise of the power of association in furnishing those conceptions, which are combined together; also the exercise of that susceptibility, by which we perceive the relations of things, known as the power of RELATIVE SUGGESTION. Nor is this all that is necessary, as will hereafter more fully appear.

§. 347. *The creations of imagination not entirely voluntary.*

The opinion, that even persons of the most ready imagination can form new imaginary creations, whenever they choose, by a mere volition, however widely it may have prevailed, cannot be maintained. To will or to exercise a volition, always implies a mental determination, a choice In accordance with the common opinion, we will suppose that a person wills, or chooses, to imagine an ocean of melted brass, or an immense body of liquid matter, which has that appearance. The statement itself evidently involves a contradiction. It is certainly impossible for a person to will to imagine any thing, since that precise thing, which he wills to imagine, must already be in his mind at the time of such volition. He wills for instance to imagine a sea of melted brass; but of what meaning or what utility is this volition, when he has already imagined the very thing, which this language seems to anticipate as future? Whatever a person wills, or rather professes to will to imagine, he has already imagined; and consequently, there can be no such thing as entirely voluntary imaginations.

§. 348. *Of imaginations not attended with desire.*

The creations, which we form by means of the power of imagination, are of two kinds, those attended with desire, and those which are not. It is the latter kind, which we speak of in this section.——There is hardly any mind so wanting in intellectual wealth as not to find clusters of associated conceptions, groups of images often arising in itself. They seem to come upon us, as it were, unbidden; and to combine themselves in a variety of proportions, pre-

senting new, and perhaps grotesque figures. But, although this varied presentation of floating imagery have the appearance of occupying the mind in an accidental manner, it all arises, and is regulated by the laws of association. No image whatever occurs, which has not some connection with the state of the mind, which preceded it. In using these expressions however, we would not be understood to imply, by the connection asserted, any thing more than this, that one intellectual state, in certain given circumstances, follows another, agreeably to an original law or principle of our constitution established by its Maker. But although we truly have here instances of the exercise of imagination, it is not of the higher and effective kind, which gives birth to the creations of poetry, and painting, and other fine arts.

§. 349. *Of imaginations attended with desire.*

While there are some combinations, the result of imagination, which are formed without any accompanying emotion of desire, there are some, where desire, or intention of some sort clearly exists. It is of cases of this last mentioned kind that we are accustomed to think, when with those intellectual susceptibilities and states, to which, considered conjointly, we give the name of imagination, we associate the idea of effective power or the ability to create. It is this frame of mind, which exists in every attempt at composition in prose and verse, where the subject admits of lively images and appeals to the passions.

It may assist us in understanding this species of imagination, if we endeavour to examine the intellectual operations of one, who makes a formal effort in writing, whether the production be of a poetic or other kind.

A person cannot ordinarily be supposed to sit down to write on any occasion whatever, without having some general idea of the subject to be written upon already in the mind. He, accordingly, commences the task before him with the expectation and the desire of developing the subject more or less fully, of giving to it not only a greater continuity and a better arrangement, but an increased in-

terest in every respect. And it may be the case, that many circumstances, indirectly relative to the effort of composition, such as the anticipated approbation or disapprobation of the public, have an affect greatly to fix and increase the emotion of interest or desire. The feeling of desire, when compared with some other emotions, is found to possess a superiour degree of permanency. And as, in the instance which we are now considering, the desire or feeling of interest is intimately connected with the general conception of the subject before the mind, the effect of this connection is a communication of the permanency, originally belonging solely to the desire, to the general idea or outlines of the subject, which the writer is to treat of. The conception, therefore, of those outlines loses in this way the fleeting and ever varying nature of other conceptions, and becomes fixed. The lineaments of the anticipated treatise remain in their length, breadth, and proportions, permanently held up to the writer's view.

Spontaneous conceptions continue, in the mean while, to arise in the mind, on the common principles of association; but as the general outline of the subject remains fixed, they all have a greater or less relation to it. And partaking in some measure of the permanency of the outline, to which they have relation, the writer has an opportunity to approve some and to reject others, according as they impress him as being suitable or unsuitable to the nature of the subject. Those, which affect him with emotions of pleasure, on account of their perceived fitness for the subject, are retained and committed to writing, while others, which do not thus affect and interest him, soon fade away altogether.

Whoever carefully notices the operations of his own mind, when he makes an effort at composition, will probably be well satisfied, that this account of the intellectual process is very near the truth.

It will be recollected, therefore, that the exercise of imagination in the composition of any theme, which admits of it, is not the exertion of merely a single intellectual ability. It is the developement of various feelings,

laws, and susceptibilities; of desire, of the principle or law of association, and of judgment or relative suggestion, in consequence of which a feeling of relative fitness or unfitness arises on the contemplation of the conceptions, which have spontaneously presented themselves.

§. 350. *Further illustrations of the same subject.*

We first think of some subject. With the original thought or design of the subject, there is a co-existent desire to investigate it, to adorn it, to present it to the examination of others. The effect of this desire is to keep the general subject in mind; and, as the natural consequence of the power of association, various conceptions arise, in some way or other related to the general subject. Of some of these conceptions we approve in consequence of their perceived fitness to the end in view, while we reject others on account of the absence of this requisite quality of agreeableness or fitness.

For the sake of convenience and brevity we give the name of IMAGINATION to this complex state or series of states of the mind. It is important to possess a single term, expressive of the complex intellectual process; otherwise, as we so frequently have occasion to refer to it in common conversation, we should be subjected, if not properly to a circumlocution, at least to an unnecessary multiplication of words. But while we find it so much for our convenience to make use of this term, we should be careful and not impose upon ourselves, by ever remembering, that it is the name, nevertheless, not of an original and independent faculty, which of itself accomplishes all, that has been mentioned, but of a complex state or of a series of states of the mind. A single further remark may be added in illustration of the process of the mind in literary composition. It has been seen to how great a degree efforts of this kind depend on the laws of association. When, therefore, a person, has sat down to write, it may be expected, that he has furnished himself with pen and paper, and that he has books around him. The presence of these and other things, subordinate to the writer's general undertaking.

constantly reminds him by the operation of the same laws of the subject before him, and recalls his attention, if he discover any disposition to wander from it.

§. 351. *Remarks from the writings of Dr. Reid.*

Dr. Reid (ESSAY IV. ch. 4.) gives the following graphical statement of the selection, which is made by the writer from the variety of his constantly arising and departing conceptions.

"We seem to treat the thoughts, that present themselves to the fancy in crowds, as a great man treats those (courtiers) that attend his levee. They are all ambitious of his attention. He goes round the circle, bestowing a bow upon one, a smile upon another; asks a short question of a third, while a fourth is honoured with a particular conference; and the greater part have no particular mark of attention but go as they came. It is true, he can give no mark of his attention to those, who were *not there*; but he has a sufficient number for making a choice and distinction."

§. 352. *Grounds of the preference of one conception to another.*

A question after all arises, on what principle is the mind enabled to ascertain that congruity, or incongruity, fitness or unfitness, agreeably to which it makes the selection from its various conceptions. The fact is admitted, that the intellectual principle is successively in a series of different states, or, in other words, that there are successive conceptions or images, but the inquiry still remains, why is one image in the group thought or known to be more worthy than any other image, or why are any two images combined together in preference to any two others?

The answer is, it is owing to no secondary law, but to an instantaneous and original suggestion of fitness or unfitness. Those conceptions, which by means of this original power of perceiving the relations of things, are found to be suitable to the general outlines of the subject, are de-

tained. Those images, which are perceived to possess a peculiar congruity and fitness for each other, are united together, forming new and more beautiful compounds. While others, although no directly voluntary power is exercised over either class, are neglected, and soon become extinct. But no account of this vivid feeling of approval or disapproval, of this very rapid perception of the mutual congruity of the images for each other or for the general conception of the subject, can be given, other than this, that with such a power the original author of our intellectual susceptibilities has been pleased to form us. This is our nature; here we find one of the elements of our intellectual efficiency; without it we might still be intellectual beings, but it would be with the loss both of the reasoning power and of the imagination.

§. 353. *Mental process in the formation of Milton's imaginary paradise.*

What has been said can perhaps be made plainer, by considering in what way Milton must have proceeded, in forming his happy description of the garden of Eden. He had formed, in the first place, some general outlines of the subject; and as it was one, which greatly interested his feelings, the interest, which was felt, tended to keep the outlines steadily before him. Then the principles of association, which are ever at work, brought up a great variety of conceptions, having a relation of some kind to those general features; such as conceptions of rocks, and woods, and rivers, and green leaves, and golden fruit.

The next step was the exercise of that power, which we have of perceiving relations, which we sometimes denominate the judgment, but more appropriately the susceptibility or power of relative suggestion. By means of this he was at once able to determine, whether the conceptions, which were suggested, were suitable to the general design of the description and to each other, and whether they would have, when combined together to form one picture, a pleasing effect. Accordingly those, which were judged most suitable, were combined together as parts of the im-

aginary creation, and were detained and fixed by means of that feeling of interest, which was at first excercised towards the more prominent outlines merely; while others speedily disappeared from the mind. And thus arose an imaginary landscape, glowing with a greater variety and richness of beauty, more interesting and perfect in every respect, than we can ever expect to find realized in nature.

§. 354. *Works of imagination give different degrees of pleasure.*

Different persons receive different degrees of pleasure from works of imagination. The fact is well known. Something may be said in explanation of it, in reference to poetry; which is one of the creations of the power, we are considering. And the same explanation will apply in part to other efforts of the imagination.——Although poetry is generally looked upon to be a useful and pleasing art, we find, that all have not the same relish for its beauties. The pleasure, which is felt by a reader of poetry will in general depend upon two circumstances, (1) the conformity of his experience to the things described. (2) the liveliness of his own imagination.

The pleasure received will depend, in the first place, on the conformity of the reader's experience to the things described.——Accordingly, if the scene of a poem be laid within the limits of a commercial city, if it deal chiefly in the description of the habits of the people residing there; and of their various turns of fortune, it will excite but comparatively little interest in those, who have been brought up wholly amid retired and rural scenes. And when, on the other hand, the scene of it is laid in the country, when it deals in the toils, and sorrows, and joys of country life, it excites comparatively little interest in those, who have never had any actual experience of that kind. Burn's Cotter's Saturday Night is an admirable poem; but it is exceedingly more pleasing to those, who can clearly perceive, from what they have themselves seen and heard and felt, its accurate conformity to nature, than to those, who cannot.

The pleasure which is felt by a reader of poetry, will depend also in part on the liveliness of his own imagination.——In poems the different parts are only imperfectly filled up; some describe more minutely than others; but the most minute describers only trace the outlines. These remain, therefore, to be filled up by the reader. But the ability to do this is found in very different degrees in different persons; some very rapidly and admirably finish the picture, and others do not. The latter, consequently, remain, in a considerable degree, unaffected, and perhaps condemn the poem as deficient in interest; while the former read it with great feeling and pleasure.——This statement accounts for the fact, that the same poem gives to different persons different degrees of satisfaction; and also, inasmuch as it requires in all cases some power of imagination in the reader, explains the circumstance, that so many appear to be utterly destitute of any relish for the beauties of the poetic art.

§. 355. *On the utility of the faculty of the imagination.*

We have proceeded thus far in endeavouring to explain the nature of imagination; and we here turn aside from this general subject, for the purpose of remarking on the utility of this power. And this appears to be necessary, since there are many, who seem disposed to prejudice its claims, in that respect; they warmly recommend the careful culture of the memory, the judgment, and the reasoning power, but look coldly and suspiciously on the imagination, and would rather encourage a neglect of it. But there is ground for apprehending, that a neglect of this noble faculty in any person, who aspires to a full developement and growth of the mind, cannot be justified either by considerations drawn from the nature of the mind itself, or by the practical results of such a course.

In speaking on the utilty of the imagination, it is certainly a very natural reflection, that the Creator had some design or purpose in furnishing men with it, since we find universally, that he does nothing in vain. And what design could he possibly have, if he did not intend that it

should be employed, that it should be rendered active, and trained up with a suitable degree of culture? But if we are thus forced upon the conclusion, that this faculty was designed to be rendered active, we must further suppose, that its exercise was designed to promote some useful purpose. And such, although it has sometimes been perverted, has been the general result.

No where is the power of imagination seen to better advantage than in the Prophets of the Old Testament. If it be said that those venerable writers were inspired, it will still remain true, that this was the faculty of the mind, which inspiration especially honoured by the use, which was made of it. And how many monuments may every civilized nation boast of, in painting, architecture, and sculpture, as well as in poetry, where the imagination, in contributing to the national glory, has at the same time contributed to the national happiness! Many an hour it has beguiled by the new situations it has depicted, and the new views of human nature it has disclosed; many a pang of the heart it has subdued, for who can indulge in the reminiscence of his own humble sorrows, when plunged in the mysteries and the woes of the Hamlet and the King Lear; it has cherished many a good resolution, and subtending, as it were, a new and wider horizon around the intellectual being, has filled the soul with higher conceptions, and inspired it with higher hopes. Conscious of its immortal destiny, and struggling against the bounds that limit it, the soul enters with joy into those new and lofty creations, which it is the prerogative of the imagination to form; and they seem to it a congenial residence. Such are the views, which obviously present themselves on the slightest consideration of this subject; and it is not strange therefore, that we find in the writings of Mr. Addison, who was not easily led astray on questions of this nature, such sentiments as the following.——"A man of polite imagination is led into a great many pleasures, that the vulgar are not capable of receiving. He can converse with a picture, and find an agreeable companion in a statue. He meets with a secret re-

freshment in a description, and often feels a greater satisfaction in the prospects of fields and meadows than another, does in the possession. It gives him, indeed, a kind of property in every thing he sees, and makes the most rude, uncultivated parts of nature administer to his pleasures; so that he looks upon the world, as it were, in another light, and discovers in it a multitude of charms that conceal themselves from the generality of mankind."

§. 356. *Of the importance of the imagination in connection with the reasoning power.*

In remarking on the subject of the utility of the imagination, there is one important point of view, in which it is capable of being considered; that of the relation of the imagination to the other intellectual powers. And, among other things, there is obviously ground for the remark, that a vigorous and well-disciplined imagination may be made subservient to promptness, and clearness, and success in reasoning. The remark is made, it will be noticed, on the supposition of the imagination being well disciplined, which implies, that it is under suitable control; otherwise it will rather encumber and perplex, than afford aid.

Take, for instance, two persons, one of whom has cultivated the reasoning power, exclusive of the imagination. We will suppose him to possess very deservedly the reputation of an able and weighty dialectician; but it will be obvious to the slightest observation, that there is, in one respect, a defect and failure; there is an evident want of selection and vivacity in the details of his argument. He cannot readily appreciate the relation which the hearer's mind sustains to the facts, which he wishes to present; and accordingly with much expense of patience on their part, he laboriously and very scrupulously takes up and examines every thing, which can come within his grasp, and bestows upon every thing nearly an equal share of attention. And hence it is, that many persons, who are acknowledged to be learned, diligent, and even successful in argument, at the same time sustain the reputation,

which is by no means an enviable one, of being dull, tiresome, and uninteresting.

Let us now look a moment at another person, who is not only a man of great powers of ratiocination, but has cultivated his imagination, and has it under prompt and judicious command. He casts his eye rapidly over the whole field of argument, however extensive it may be; and immediately perceives what facts are necessary to be stated, and what are not; what are of prominent, and what of subordinate importance; what will be easily understood and possess an interest, and what will be difficult to be appreciated, and will also lose its due value from a want of attraction. And he does this on the same principle, and in virtue of the same mental training, which enables the painter, architect, sculptor, and poet, to present the outlines of grand and beautiful creations in their respective arts. There is a suitableness in the different parts of the train of reasoning; a correspondence of one part to another; a great and combined effect, enhanced by every suitable decoration, and undiminished by any misplaced excrescence, which undoubtedly implies a perfection of the imagination, in some degree, kindred with that, which projected the group of the Laocoon, crowned the hills of Greece with statues and temples, and lives in the works of renowned poets. The debater, who combines the highest results of reasoning with the highest results of the imagination, throws the light of his own splendid conceptions around the radiance of truth; so that brightness shines in the midst of brightness, like the angel of the Apocalypse in the sun.

§. 357. *Of misconceptions by means of the imagination.*

But while it is safe to admit, that the imagination may be made subservient to valuable purposes, it is no less true, that it may sometimes mislead us. The following are instances among others, where this is the result.

Our admiration of the great may be reckoned a prejudice of the imagination. We are apt to suppose them possessed of personal attractions, and of the highest happiness; and not only this, to invest them with every wor-

thy moral attribute. "The misfortunes, (says a late writer,) of Mary, Queen of Scots, and of her descendant, Prince Charles Edward, commanded the sympathy, the love, and the enthusiasm of millions. In the cause of these princes, how many have joyfully sacrificed life, though neither of them was worthy or capable of reigning! How many labour still to blot out every stain from their memory! And yet every individual, in the circle of his own private friends and acquaintances, can undoubtedly find many persons more distinguished for virtue, for good principles, for integrity of character, than the prince for whom he is willing to lay down his life; but a friend, a private man, is invested with none of those attributes, always dazzling but often false, which are calculated to strike the imagination."

Our imaginations mislead us also in respect to war, whenever we contemplate it at a distance, and do not feel its effects at our own fire-sides and homes. We delight to dwell upon the idea of mighty power, which it suggests; we recall to memory the homage and plaudits, which have been given to the brave; we combine together conceptions of all, that is stirring in music, and brilliant in equipage. In a word, it is a kindling imagination, seizing upon some imposing circumstances, that leads multitudes into deplorable mistakes as to the character of that great scourge of the human race.——Again; the power of imagination often gives a wrong colouring to future life. It is here as in some prospects in natural scenery,

'Tis distance lends enchantment to the view.

Whatever may be our present evils, we imagine there is good to come. We rush forward in the pursuit of it, like children, who set out with spirited emulation, expecting to grasp in their hands the splendours of the rainbow, that appears to them to rest upon the neighboring hills.

§. 358. *Explanation of the above misrepresentations of the imagination.*

But how happens it, that this faculty so often misleads us? What explanation can be given?

The answer is, that the mind turns away with a natural aversion from whatever causes it pain or uneasiness; delighting to dwell on the elements of beauty and sublimity, and in general on all scenes, which exite in it pleasant emotions. As there is, therefore, more or less in all actual situations, which causes dissatisfaction, we shall always find, in every condition, in which we are placed, something which detracts from what we imagine to be the sum of happiness. The evils, which are around us and near us, we MUST know; our situation forbids an attempt at the concealment of them. Every day forces the lesson of human adversity on our attention. But when we look abroad from the reality, which exists at home, from the cares and sorrows, which are ever near at hand, to other scenes and prospects, we do not think of trial and disappointment, because we are not obliged to. We fix our attention upon those circumstances, which appear most favourable and interesting; and, consequently, know nothing of the uneasiness and misery, which actually exist in the imaginary paradise of our creation.—For instance, we are apt to associate, as has been remarked, with persons in very high stations in life, the ideas of unalloyed happiness, of moral excellence, of manliness and beauty of form; but while men in the most exalted stations have no less a share than others of bodily deformities and suffering, they have still greater anxieties; their hours of sorrow are often more numerous than those of any other class of persons. It was well inquired by King Henry in Shakspeare,

> "What infinite heart's ease must kings neglect,
> "That private men enjoy?———
> "And what have kings, that privates have not too,
> "Save ceremony, save general ceremony?

And under the direction of the same mental tendency, by which we are led to mark the elevations without noticing the depressions of the great men of the earth, we are led also to see the sublimities and hide from our sight the degradations and miseries of war, to behold the sunshine of the future, but no clouds.

CHAPTER TWELFTH.

ORIGIN OF PREJUDICES.

§. 359. *Of the meaning of prejudices.*

In forming our judgments or opinions of things, we are led to take into consideration a variety of facts and circumstances, which are applicable to the particular subjects under consideration, and are fitted to influence the mind in the formation of such opinions. The circumstances and facts, which are thus fitted to influence our belief, in consequence of giving new views in respect to the subjects before us, are commonly termed EVIDENCE. But it is well known, that the full and natural force of evidence is often interrupted and weakened by the operation of various causes. Besides the agency of other causes, by means of which the judgment is led into errour, there are some in the mind itself; particularly casual, but strong associations arising there of various sorts, and under various aspects. The term prejudices, as it is commonly employed, embraces the greater number of these grounds or causes of erroneous judgments.

PREJUDICES, therefore, to which we are now to attend, are judgments or opinions, which are formed without a suitable regard to the evidence, properly pertaining to them; whenever, for example, sources of evidence, which are within our reach, are overlooked; or when the facts

and incidental circumstances, constituting the evidence, are allowed to have too great or too little influence. A mind, which discovers a tendency thus to overlook or misapply grounds of evidence, is called a prejudiced mind.

A greater or less degree of importance will be attached to this subject, according as we attach a greater or less degree of value to the possession of correct and enlightened opinions. None can consider it unimportant; many will justly regard it, as of the very highest importance. It is the object of this chapter to point out some of the principal sources of prejudices.

§. 360. *Of prejudices in favour of our youth.*

Many of those opinions, which we form of the scenes, and events, and characters of our youthful days, are prejudices. As we look back and frame an estimation of that early period, the associates of our childhood and youth seem to us to have been without a crime; in those happy days the interests of parents were never at variance with those of their children; masters sought the good of their dependants; the poor were welcome sharers in the abundance of the rich; magistrates were virtuous; the religious teachers were eminently holy men. Alas! for these evils days of our manhood and old age, in which there is such rottenness in all civil institutions, which recent times have established; such corruption in every new set of magistrates; and such depravity in the great mass of the people! The causes of this apparent disparity between the world, as it exists now, and formerly, are briefly these.

In the morning of life every thing is new; our attention is arrested by a multitude of novel objects, and the mind is filled with delight. Happy ourselves, we imagine that, with few exceptions, all others are not less so; and while our own hearts are conscious of innocence, we are exempt from any suspicion of crime in others. In a word, we suppose all the world to be happy, all the world to be innocent and just, because we are conscious of the existence of rectitude and truth and innocence in ourselves, and are

too inexperienced to be aware of the frequency of their absence from the great mass of mankind. As we grow up, cares multiply, bodily infirmities increase; we more often see collisions of interest, hollow professions, deceptive expedients, and intriguing arts of all kinds; and what is worse, we discover in our own breasts more of distrust, jealousy, passion, and other evils, than have been developed in our earlier days.

The true solution then is this; We attribute to one thing what belongs to another. We ascribe to the great mass of mankind, changes which have only taken place in ourselves.—— The world appears to us differently from what it did when we were young, not because it has itself essentially altered, (which can never be supposed to have happened in a single life of man;) but because we, as individuals, have become more acquainted with its true character, and are made more sensibly to feel the pressure of its many ills. And it is for such reasons as these undoubtedly, that old men so often appear to be strangers in the midst of every thing that is present, and to live only in the world that is past.

In the adventures of Gil Blas, a work which cannot be denied to possess the merit of an intimate knowledge of human nature, we are introduced to the company of two old men, Count d'Asumar, and Signor Pacheco.—— "Count d' Asumar, far from concealing his grey hairs, supported himself on a cane, and seemed to glory in his old age. Signor Pacheco, (said he, as he came in,) I am come to dine with you. You are very welcome, Count, (answered my master.) Meanwhile, having embraced one another, they sat down, and entered into conversation, till such time as dinner was ready. The discourse turned first upon a bull-feast, which had been celebrated a few days before; and as they mentioned the cavaliers, who had shewn the greatest vigour and address, the old Count, like another Nestor, who, from talking of the present, always took occasion to praise the past, said, with a sigh; 'Alas, I see no men now-a-days comparable to those I have known heretofore; and the tournaments are not performed

with half the magnificence that they were when I was a young man.'—I laughed within myself at the prejudice of honest Signor d'Asumar, who did not confine it to tournaments only; but I remember, when the dessert was set upon the table, seeing some fine peaches served up he observed, In my time the peaches were much larger than they are at present; nature degenerates every day.——At that rate, (said Don Gonzales, smiling,) the peaches of Adam's time must have been wonderfully large."

§. 361. *Of prejudices of home and country.*

There are prejudices in favour of one's native country and of the village, where he may happen to have been brought up, and to live. And this prejudice in favour of one's own residence and nation is too often attended with a contempt and dislike of those, who have their origin elsewhere. It is notorious, that two of the most powerful and well informed nations on earth, the French and English, have for a long series of years affected to despise, and have most certainly hated each other. The French and Spaniards, who also are near neighbours to each other, have hardly been on better terms. The Italians, flattered by the eminent success of some of their countrymen in the arts, term the Germans blockheads; while the Germans get their satisfaction by bestowing the same appellation on the Swiss. Even the poor and ignorant Greenlander has his grounds of triumph; and amid his rocks and snows fondly imagines, that there is no home, no freedom like his.

Different explanations may be given of the origin of this strong attachment to our nation and the place of our residence; and of the contempt, which is often entertained for others. Whatever explanation may be adopted, the existence of such feelings is well known, and their influence in perplexing our judgments of men and things extensively felt. This is seen in the criticisms, which are made by the authors of one nation on the productions in literature and the arts of another. With the Englishman, Montesquieu is superficial and dull; with the Frenchman,

Newton dwindles down to a mere almanack-maker; in one country a writer is extolled on account of the place of his birth, and in another is decried and put down for the same reason.——It is important to all to be aware of the tendency to form erroneous opinions in consequence of these predilections and antipathies. A mind well balanced, and anxious to know the truth and to do equal and exact justice to all, will carefully guard against it.

§. 362. *Professional prejudices.*

Some erroneous opinions may be attributed to men's professions or callings in life. A little self-examination will convince us, that our feelings are apt to be unduly enlisted in favour of those, who are practising the same arts, pursuing the same studies, engaged in the same calling of whatever kind. When at any time it falls to us to discriminate between such and persons of another art or calling; to determine which has the greatest merit, or is the deepest in crime, there is no small difficulty in becoming entirely divested of this feeling. It continually rises up, even when we seem to be unconscious of it; it gives a new aspect to the facts, which come under examination; it secretly but almost infallibly perplexes the decisions of men, who have the reputation of candour, and who would be offended at the imputation of intended injustice.

The causes of prejudices, arising from particular professions in life, are undoubtedly much the same, as those which are at the bottom of the partial sentiments, which people entertain of their own home and country. There is something in our constitution, which leads us to feel a deep interest in those, with whom we are much associated, whose toils are the same, who have the same hope to stimulate, and the same opposition to encounter. Besides, our own selfish feelings are at work. Our honour, and consequently, our respectability are in some degree involved in that of the profession. As that rises or falls, individuals experience something of the elevation or depression.

Under this class of prejudices may be reckoned those,

resulting from that contraction and halting of the mind, which is often superinduced by an exclusive attention to one class of subjects or to one train of thought. When a man, who has been taught in one science only, and whose mental operations have consequently been always running in one track, ventures out of it, and attempts to judge on other subjects, nothing is more common than for such an one to judge wrong. It is no easy matter for him to seize on the true distinctions of things beyond his particular sphere of knowledge; and he mistakes not only in respect to the nature of the things themselves, of which he is to judge, but also as to the nature and rules of the evidence applicable to them.——An eminent mathematician is said to have attempted to ascertain by calculation the ratio, in which the evidence of facts must decrease in the course of time, and to have fixed the period, when the evidence of the facts, on which Christianity is founded, shall become extinct, and when, in consequence, all religious faith must he banished from the earth.

§. 363. *Prejudices of sects and parties.*

In religious sects, and in political or other parties, prejudices are still stronger, than those of particular arts and professions. In sects and parties there is a conflict of opinions, and not of trades; a rivalship of principles, and not of mere labour and merchandize. It is, therefore, an active, an aspiring competition. Too restless to lie dormant, it is introduced in high-ways, and workshops, and private and public assemblies; too ambitious to be easily overcome, it continually renews and perpetuates the conflict. The prejudices, therefore, of sects and parties have all the elements of professional prejudices, embittered by constant exercise. They convulse nations; they disturb the peace of neighbourhoods; they break asunder the strong ties of family and kindred.

The history of every republic, not excepting our own, affords abundant instances of the putting forth of these virulent and ungenerous tendencies. We do not mean to

say that a man cannot belong to a party without being prejudiced; however difficult it may be, to be placed in that situation without being tinctured with those feelings. But wherever they actually exist, they deaden every honourable sentiment; they perplex evey noble principle. Nothing can be clearer evidence of this, than that we continually behold men of exalted patriotism, and of every way unsullied character, traduced by unfounded imputations and charges; and which are known to be so by those political opponents, who make them. And it is a still more striking illustration of the strength of party prejudices, that we find a political measures, advocated or opposed by the same men, as they happen to be in or out of office; or as the measures in question happen to be advocated or opposed by the members of the other party. As if men, and not measures; as if places without regard to principles, were to be the sole subject of inquiry.

The prejudices of sects have been no less violent than those of political parties, as may be learnt from the hostility, which is yet exercised among them, and from the history of former persecutions and martyrdoms. Even philosophy has not been exempt; different scientific systems have had their parties for and against; and the serious and dignified pretensions of philosophic inquiry have not always preserved them from virulent contentions, which were not merely discreditable to science, but to human nature. We are told in the histories of philosophical opinions, that the controversies between the Realists and Nominalists ran so high, as to end not only in verbal disputes, but in blows. An eye-witness assures us, that the combatants might be seen, not only engaging with fists, but with clubs and swords, and that many were wounded, and some killed. Not a very suitable way, one would imagine, of deciding an abstract, metaphysical question.

§. 364. *Prejudices of authority.*

Men often adopt erroneous opinions merely because they are proposed by writers of great name. The writings of Aristotle were upheld as chief authorities for a number

of centuries in Europe, and no more was necessary in support of any controverted opinions, than to cite something favourable from them. The followers of Des Cartes received hardly less implicitly the philosophical creed of that new master of science; not so much because they had investigated, and were convinced in view of the evidence before them, as because Des Cartes had said it. There have been teachers in religion, also in politics and other subordinate departments of science, who have had their followers for no better reason. Such prejudices have been a great hinderance to free discussion and the progress of knowledge.

The influence of authority in giving a direction to people's opinions is not limited to persons, who can truly make pretensions to some superiour wisdom; it is also frequently exercised by mere riches, titles, and outward splendour. This is often seen in republican states, where the people have the right of choosing their rulers, and of expressing their opinions on a variety of public questions. It is well, if not more than half of the people in any of the smaller corporations do not, in giving their suffrages, fall in with the sentiments, however absurd they may be, of a few individuals, who have no other claim to influence, than what their greater affluence gives them. But this is a very unreasonable prejudice. The poorer classes of the community, deprived of the adventitious aids of wealth, should set a proper value on personal character, and let it clearly appear in all cases, where they are at all capable of judging, that they have understandings, and possess and value freedom.

§. 365. *Prejudices of personal friendships and dislikes.*

If man were to choose a state of apathy and indifference, he would be unable to obtain it, at least permanently; it would be refused to him by the very elements, the original laws of his nature. He is destined not only to act but to feel; and his feelings in respect to others will vary, according as he has been more or less in their company, as he has received from them greater or less favours or injuries. Hence he has his sympathies and his dislikes, his favourable and unfavourable sentiments, his friends and

his opposers. And here we have another source of prejudices. It is so well understood as to have become a common saying, that it is a difficult matter to judge, with perfect impartiality, either of friends or foes. A question arises, we will suppose concerning the merit or demerit, the right or wrong in the conduct of a friend; of one, in whose favour our sympathies are strongly enlisted. In the deliberation upon the facts before us, which we attempt to hold, the mind is continually interrupted by the remembrance of those kind acts and excellent qualities, which have laid the foundation of our favourable partialities. They come before the eye of the judgment; we attempt to remove them, and they return again; they interrupt and cloud the clearness of its perceptions. And hence, our judgments prove to be wrong.

We experience the same difficulty in forming a just estimate of the character and conduct of those, for whom we entertain a personal dislike.——There is a continual suggestion of acts and of qualities, which are the foundations of that dislike. The effect of this is partly to divert the mind from the question properly before it, and partly to diffuse over it a misrepresentation, which has its origin solely in our own feelings of antipathy. Our dislike interposes itself, as in the other case, between the thing to be judged of, and the susceptibility of judging, and renders the mind unable to perceive so clearly the true merits of the question, as it otherwise would.

§. 366. *Prejudices of custom or fashion.*

The practices of different nations, and the prevailing notions in respect to them, differ from each other; nor are those of the same nation the same at different periods.——The modes of salutation in France are different from those of Russia; and those of both nations are different from the forms, which are commonly received in Oriental countries. There is no less diversity among nations in the fashions of dress, than in the methods of civility, and of polite intercourse. The dress of a Turk or of a Chinese would make but an ill figure on an Englishman; and the English-

man himself would reject with contempt the obsolete and neglected fashion of his own ancestors.——The authority of fashions extends also to political and religious ceremonies, to the regulation and management of domestic affairs, and to methods of education. No two nations are alike in all these respects; and hardly one age, or one year agrees with another.

We find in the authority of fashion or custom a fruitful source of limited and erroneous judgments. Each nation passes its censure on the customs, that prevail abroad, but are not adopted at home; each age ridicules the practices of a preceding age, that have since become obsolete. We have great reason for considering these limited and premature judgments prejudices. We see no grounds, why one nation, especially where there is nearly an equal degree of mental improvement, should set itself up as an infallible judge of propriety and impropriety in the customs and ceremonies of another nation.——But the fallacy consists not merely in ignorantly censuring others. The great body of people are found to be not more unanimous in censuring the opinions and fashions of other ages and nations, than they are, in blindly and implicitly adopting those of their own, however trivial or absurd they may be. They do, as they see others do; this method they have followed from their youth up, without exercising their own judgment; and in this way custom has become to them a 'second nature.'

§. 367. *Correctives of fashionable prejudices.*

Something may perhaps be proposed to alleviate that tyranny of fashion, which has now been spoken of. ——"Three things, (says Watts.) are to be considered, in order to deliver our understandings from this danger and slavery.

(1.) That the greatest part of the civil customs of any particular nation or age spring from humour rather than reason. Sometimes the humor of the prince prevails, and sometimes the humor of the people. It is either the

great or the many, who dictate the fashion, and these have not always the highest reason on their side.

(2.) Consider also that the customs of the same nations in different ages, the customs of different nations in the same age, and the customs of different towns and villages in the same nation are very various and contrary to each other. The fashionable learning, language, sentiments, and rules of politeness, differ greatly in different countries and ages of mankind; but truth and reason are of a more uniform and steady nature, and do not change with the fashion. Upon this account, to cure the prepossessions which arise from custom, it is of excellent use to travel and see the customs of various countries and to read the travels of other men, and the history of past ages, that every thing may not seem strange and uncouth, which is not practised within the limits of our own parish, or in the narrow space of our own life-time.

(3.) Consider yet again, how often we ourselves have changed our opinions concerning the decency, propriety, or congruity of several modes or practices in the world, especially if we have lived to the age of thirty or forty. Custom or fashion, even in all its changes, has been ready to have some degree of ascendency over our understandings, and what at one time seemed decent, appears obsolete and disagreeable afterwards, when the fashion changes. Let us learn, therefore, to abstract as much as possible from custom and fashion, when we would pass a judgment concerning the real value and intrinsic nature of things."

§. 368. *Of guarding against prejudices in early education.*

We conclude the subject of prejudices, which assumes such a variety of forms, and is not even yet fully exhausted, with one or two practical remarks, naturally flowing from it, on the education of the young. If the human mind be exposed to the many undue influences, which have been mentioned, it is certainly an obvious consideration, that great pains should be taken in training up the young

False notions take root in the mind at an early period; and often, before they are supposed to be planted, have gained strength and permanency. A superstitious belief in the agency of spiritual beings in the dark, which is early received, is only one of the many false notions, with which the mind is then liable to be impressed, by means of a wrong intellectual culture. A whole host of errours, to which we have found ourselves exposed in consequence of various influences operating upon us, may have their origin at the same time; even errours of a moral, political, and religious nature. Individuals can sometimes state, as far back as their memory can reach, circumstances (perhaps an accidental remark, perhaps an unimportant religious ceremony,) which have had a permanent influence.

Prejudices so numerous and tenacious are introduced into the mind in childhood, that it requires much pains and time in after life to unlearn the false notions, to which we have been accustomed to render an implicit belief. The struggle against the influence, which they have acquired over us, will be found to be a severe one; and oftentimes it is quite unsuccessful. Many persons, who have been fully aware of the extent and evil nature of the tendencies which were given to their minds in early life, have desired to counteract and annul their influence, and have made efforts to that purpose, but without effect. The seeds, that were sown in the nursery, and had borne their fruits in youth, had taken too deep root to be eradicated in the fulness of years. The hue of the mind, whether it be a tint of beauty or deformity, has contracted the unchangeableness of the Ethiopian's skin and of the leopard's spots.——We infer, therefore, that it is a part of all right education, and the duty of all, who are engaged in instructing young minds, not only to guard against the admission of any thing other than the truth, but also to guard against all such influences of whatever kind as are unfavourable to the apprehension and reception of it.

PART THIRD.

SENTIENT STATES OF THE MIND.

CLASS FIRST.

EMOTIONS.

CHAPTER FIRST.

EMOTIONS OF BEAUTY.

§. 369. *Of the sentient states of the mind in general.*

Having, in the second Part of this Work, completed, in a very considerable degree, what was necessary to be said on the intellect, it is now time to enter on the consideration of that part of our nature, which is sometimes denominated the heart, in distinction from the pure understanding or intellectual part of man.

The obvious and acknowledged grounds of distinction between these two parts of our mental constitution have been explained in another place, (chap. xiii, Part I;) and it will not perhaps be thought necessary to resume the consideration of them here. We may safely appeal to the terms used in all languages, to the speculations of philosophers, and to each one's consciousness in confirmation of the principle, that such a distinction is well founded, and has a reality in nature. The topics, accordingly, which we are now about to enter upon, have their specific character, and relate to the emotions, desires, volitions, feelings of obligation, &c; all of which states of mind, whether they appear under a simple or a complex form, may be considered as included under the epithet *sentient*.

We do not ordinarily apply that epithet to the mere perceptions and deductions of the understanding; but under the general head of Sensibility or SENTIENCE, (if that term were allowable by the established usage of the language,) is included every thing, which involves some degree of feeling.—And it may be asserted without hesitation, that subjects of this kind present very high claims to our notice. If man had been made of intellect only; if he could merely have perceived, compared, associated, and reasoned, without a single desire, without a solitary emotion, without sorrow for suffering or sympathy in joy; if he had been all head and no heart; the human soul would have shown a depressed and different aspect, compared with what it does at present. It was this part of human nature, which Socrates particularly turned his thoughts to; and on account of which he was pronounced by the Oracle the wisest of all men living. In these inquiries we are let into the secrets of men's actions, for here we find the causes, that render them restless and inquisitive, that prompt to efforts both good and evil, and make the wide world a theatre, where vice and virtue, hope and fear, and joy and suffering mingle in perpetual conflict.

§. 370. *Of the general division of the sentient states of the mind into emotions, desires, &c.*

We no sooner carefully direct our attention to the sentient states of the mind, to the feelings in distinction from the thoughts and intellections, than we find them susceptible of being arranged into the four general classes of EMOTIONS, DESIRES, FEELINGS OF OBLIGATION, and VOLITIONS. These various species of feeling sometimes closely approximate, and may even mingle together, forming a new and complex one; and yet our consciousness is able to distinguish them from each other.

When we come to feelings of obligation and volitions, it will be proper to say something on their distinctive nature. But as the two other classes are first considered, it is an inquiry more naturally arising here, What is the distinc-

tion between Emotions and Desires?—As the original feelings, expressed by both of these terms, are simple, it would be of no avail to attempt to define them; nor do we profess to ascertain the difference between them in this way. We can learn this difference by our own internal examination and by consciousness alone; nor can any form of mere words illustrate to our comprehension either their nature or their distinction, independently of such internal experience, excepting perhaps in the single circumstance, that emotions are instantaneous, while there is apparently a greater permanency in desires. These last continue the same as when they first arose, so long as the objects, towards which they are directed, are the same; while the emotions are in general more transitory.——But even this distinction, which we are able to understand, without having recourse to our consciousness of the feelings themselves, may fail at times; at least apparently so. It is not unfrequently the case, that objects, which are fitted to call forth emotions, remain before the mind a considerable period, and that emotions, mingling with those that went before, arise in succession to emotions, and with such rapidity as to give them all, though many in number, an appearance of actual sameness, continuity, and permanency.

§. 571. *Explanations and characteristics of emotions of beauty.*

It is presumed, that no one is ignorant of what is meant, when we speak of a melancholy emotion, of a cheerful emotion, of emotions of pain, of pity, of wonder, of cheerfulness, of approval and the like. Among other feelings of this nature are those, which have particular relation to objects external to the mind, such as emotions of beauty, grandeur, and sublimity.——In the present chapter our attention will be particularly directed to those of BEAUTY.

Of the emotions of beauty it will be as difficult to give a definition, so as to make them clearer to any one's comprehension than they already are, as to define the simple

sensations of colour, sound, or taste. We find in them, however, these two marks or characteristics.

(1) The emotion of beauty, in the first place, is always a pleasing one. We never give the name to one, which is painful, or to any feeling of disgust. Whenever, therefore, we speak of an emotion of beauty, we imply, in the use of the terms, some degree of satisfaction or pleasure. All persons, the illiterate as well as the scientific, use the phrase with this import.—(2) We never speak of emotions of beauty, to whatever degree may be our experience of inward satisfaction; without referring such emotions to something external. The same emotion, which is called satisfaction or delight of mind, when it is wholly and exclusively internal, we find to be termed an emotion of beauty, if we are able to refer it to something without, and spread its charms around any external object.

§. 372. *Of what is meant by beautiful objects.*

There are a great variety of material objects, which excite the emotion of beauty; that is, when the objects are presented, this emotion in a greater or less degree, (for the emotion itself is susceptible of many varieties,) immediately exists. But it is a common saying, and probably will be deemed a just one, that material objects have neither beauty nor deformity in themselves; neither value nor want of it, independently of their applications and results. All bodies of matter are mere assemblages of particles, and the different arrangment of those particles constitutes the sole difference between one object and another. The ashes, that are mouldering in the tomb, do not differ from the living form of man in the materials, but only in disposition and in symmetry. In themselves considered, therefore, all bodies of matter are without beauty; the fairest creations of architecture, and the dust, on which they are erected, are alike in that respect; all are originally destitute of that interest, which we denominate beauty.

The beauty of objects being something not in the nature of the things themselves, although we constantly speak

of them as possessing that quality, it is necessary to enter into some explanation.——Whenever certain objects are presented to us, there is a feeling of pleasure, in a higher or less degree. This feeling, which is termed an emotion of beauty, does not exist, it will readily be admitted, in the object, which cannot be supposed to be susceptible of it, but in the mind which contemplates the object. And here we have the solution of the point, on which we are remarking.

We have from earliest childhood been in the habit of referring this mental emotion, of which no inanimate object can possibly be susceptible, to external objects, as its antecedent. We have made this reference for so long a time, and so frequently, that at last, in consequence of a very tenacious association, the object itself seems to us to be invested with delight, and to beam out with a sort of mental radiance; that is, to have qualities, which can truly and properly exist only in the mind. Such objects are termed by us BEAUTIFUL OBJECTS.

§. 373. *Results of constantly referring emotions of beauty to the outward cause.*

The result of this strong and early disposition, to refer the emotions within us to those external objects, which are the antecedents to them, is, that all material creation is clothed over again. There is a beauty in the sun; there is a beauty in the moon walking in brightness, and in the attendant stars; there is a beauty in the woods and waters; and blossom, and flower, and fruit are all invested with the same transferred or reflected splendour. But annul the emotions of the mind, which throws back its own inward light on the objects around it; and the sun will become dark, and the moon will withhold its shining, and the flower will be no more delightful, than the sod, from whose mouldering bosom it springs up.

But we do not wish to be misunderstood here. It is admitted, on the supposition of all intelligence and feeling being abolished, that the material world would still continue to be the same in itself, but it would realize and la-

ment, (if inanimate nature could be supposed to be capable of feeling in any case,) the loss of the correlative and interpreting mind. There would be the same substance, the same outlines and forms, and the same qualities; but these forms and qualities would not have the same import, the same significancy. It must be evident, that sounds of harmony and discordance, though different in themselves, do not differ in their effects, when both are wasted on the desert air. Nor is there any such difference in forms of beauty and deformity, as would lay a foundation for the application of those terms, where there is no eye to behold, and no heart to rejoice in them.

§. 374. *Extensive application of the term beauty.*

Emotions of beauty are felt, and perhaps in a higher degree than any where else, in the contemplation of objects of sight, of woods, waters, azure skies, cultivated fields, and particularly of the human form. But they are not limited to these; emotions, which not only bear the same name, but are analogous in kind, exist also on the contemplation of many other things.

The sentiment or feeling of beauty exists, when we are following out a happy train of reasoning; and hence the mathematician, who certainly has a delightful feeling, analogous to what we experience in contemplating many works of nature, speaks of a *beautiful* theorem.

The connoisseur in music applies the term *beautiful* to a favourite air; the lover of poetry speaks of a beautiful song; and the painter discovers beauty in the design, and in the colouring of his pictures. We apply the term, beauty, to experiments in the different departments of physics; especially when the experiment is simple, and results in deciding a point, which has occasioned doubt and dispute.

Also, in the contemplation of moral actions, we find the same feelings. The approbation, which we yield, when the poor are relieved, and the weak are defended, and the vicious are reclaimed, and any other deeds of virtue are done, is always attended with a delightful movement of the heart.——So that all nature, taking the word

n a wide sense, is the province of beauty ; the intellectu-
l, and the moral, as well as the material world. There
s such an analogy, such a resemblance in the feelings in
ll these cases, that, if the term beauty be proper to ex-
press one, it is no less appropriate to all. It is in truth
onstituted a *common name*, expressive of a variety of emo-
ions, arising on different occasions, but always pleasing,
nd varying rather in the occasions of their origin and in
legree, than in their real nature.

In particular, they agree in their nature as to this,—we
efer all the emotions, which come under the denomina-
ion of beauty, to the objects, whatever they may be,
which are found immediately and constantly to precede
hem. The charm of the mind, which exists solely in
ourselves, seems to flow out and to spread itself over the
severest labours of intellect, over the creations of the ar-
chitect, over the fictions of the imagination, over virtu-
ous moral actions, and whatever else we call beautiful, no
ess than upon those forms of material nature, which fill
us with delight.

§. 375. *All objects not equally fitted to excite emotions of beauty.*

From what has been said, it must be evident, that there is a correspondence between the mind and the outward objects, which are addressed to it. This has already been clearly seen in respect to the sensations and external perceptions ; and it is not less evident in respect to that part of our nature, which we are now attending to. The mind, and the external world, and the external circumstances of our situation in general are reciprocally suited to each other. Hence, when we ascribe the quality of beauty to any object, we have reference to this mutual adaptation. An object is ordinarily called beautiful, when it has agreeable qualities; in other words, when it is the cause or antecedent of the emotion of beauty.

But no one can be ignorant, that not all objects cause the emotions ; and of those which do, some have this power in a greater, and some in a less degree. This brings

us to a very important inquiry. It is no unreasonable curiosity, which wishes to know, why the effect is so limited, and why all objects are not embraced in it? Why different objects cause the same emotion in different degrees? And why the same objects produce a diversity of emotions in different individuals, and even in the same individual at different times?

§. 576. *A susceptibility of emotions of beauty an ultimate principle of our constitution.*

In answering these questions, something must be taken for granted, there must be some starting point; otherwise all that can be said, will be involved in inextricable confusion. That is, we must take for granted, that the mind has an original susceptibility of such emotions. Nor can we suppose, there can be any objection to a concession, which is warranted by the most general experience. We all know, that we are created with this susceptibility, because we are all conscious of having had those emotions, which are attributed to it. And if we are asked, How, or why it is, that the susceptibility at the bottom of these feelings exists, we can only say, that such was the will of the Being, who created the mind; and that this is one of the original or ultimate elements of our nature.

Although the mind, therefore, is originally susceptible of emotions, as every one knows; still it is no less evident from the general arrangements we behold, both in physical and in intellectual nature, that these emotions have their fixed causes or antecedents. We have seen, that these causes are not limited to one class or kind; but are to be found under various circumstances; in the exercises of reasoning, in the fanciful creations of poetry, in musical airs, in the experiments of physics, in the forms of material existence, and the like. As a general statement, these objects cannot be presented to the mind, and the mind be unmoved by it; it contemplates them, and it necessarily has a feeling of delight of a greater or less degree of strength.

In asserting, that this is correct as a general statement,

it is implied, that some objects do not originally cause these emotions. And hence we are led to enter into more particular inquiries.

§. 377. *Remarks on the beauty of forms.*

In making that selection of those objects, and qualities of objects, which we suppose to be fitted, in the original constitution of things, to cause within us pleasing emotions of themselves, independently of any extraneous aid, we cannot profess to speak with certainty. The appeal is to the general experience of men; and all we can do, is, to give, as far as it seems to have been ascertained, the results of that experience. Beginning, therefore, with material objects, we are justified by general experience in saying, that certain dispositions or forms of matter are beautiful; for instance, the CIRCLE.

We rarely look upon a winding or serpentine form, without experiencing a feeling of pleasure; and on seeing a circle, this pleasure is heightened. Hence Hogarth, in his Analysis of BEAUTY, expressly lays it down, that those lines, which have most variety in themselves, contribute much towards the production of beauty, and that the most beautiful line, by which a surface can be bounded, is the waving or serpentine, or that which constantly, but imperceptibly deviates from the straight line. This, which we frequently find in shells, flowers, and other pleasing natural productions, he calls the line of beauty. And was not Hogarth right in the opinion, that there is at least a degree of beauty in such outlines, whether they are the most beautiful or not? Refer it to any man's experience, and let him say, when he gathers on the seashore wreathed and variegated shells, or beholds through distant meadows the winding stream, or pauses in pathless woods to gaze on the flowing features of the rose, does he not at once feel within him a spontaneous movement of delight? Is not the object, which is directly before him, in itself a source of this feeling? Although he may have a superadded pleasure from some other source, as we shall have occasion to see; still, considering the subject particularly

in reference to the object before him, may not the true philosophy be summed up in the single assertion, that he sees, and feels; that he beholds, and admires. It results, therefore, from the common experience of mankind, that objects, which are circular, or approach that form, or exhibit an irregular, but serpentine outline, have a degree of beauty. What can be imagined more beautiful than the arch of the rainbow, stretching over our heads from the rising of the sun to its going down, even if nothing but the form and the outline were presented to our vision, without the unrivalled splendour of its colours? The dark blue hemisphere of the visible sky is a beautiful object, although it undoubtedly becomes more so, when from time to time the golden companies of stars gleam upward from its unsearchable depths.

There remains, however, this explanatory remark.—We have much reason to believe, that the emotion will be stronger in all cases, in proportion as the beautiful object is distinctly and immediately embraced by the mind. Perhaps it may be said with some good reason, that the square form has a degree of beauty, as well as the circle: although it cannot be doubted, that it has less. And it is matter of inquiry, whether the difference in this respect is owing so much to the original power of the forms themselves, as to the circumstance just alluded to; in other words, whether it be not owing to the fact, that the circle, being more simple, makes a more direct, entire, and powerful impression; whereas the attention is divided among the sides and angles of a square.

§. 378. *Of the original beauty of colour.*

We experience what may be termed an original emotion, which is pleasing, in beholding colours. We are able merely to allude to abundant sources in proof of this, without entering, at the present time, into a full exposition of them.

(1) The pleasure, which results from the mere beholding of colours, may be observed in very early life. It is in consequence of this pleasing emotion, that the infant so

early directs its eyes towards the light,that breaks in from the window,or which reaches the sense of vision from any other source. It is pleasing to see with what evident extacy, the child rushes from flower to flower, and compares their brilliancy. Casting his eyes abroad in the pursuit of objects, that are richly variegated, he pauses to gaze with admiration on every tree, that is most profusely loaded with blossoms, or that is burdened with fruit of the deepest red and yellow. It is because he is attracted with the brightness of its wings, that he pursues the butterfly with a labour so unwearied, or suspends his sport to watch the wayward movements of the humming bird.

(2) The same results are found also, very strikingly and generally, among all savage tribes. Not unfrequently the untutored sons of the forest forget the ardour of the chace in their speculations on the wild roses by the wayside. Seeing how beautiful the fish of their lakes and rivers, and the bird of their forests, and the forest tree itself is rendered by colours, they commit the mistake of attempting to render their own bodies more beautiful by artificial hues. They value whatever dress they may have, in proportion to the gaudiness of its colours ; they weave rich and variegated plumes into the hair ; and as they conjectured from his scarlet dress,that Columbus was the Captain of the Spaniards, so they are wont to intimate and express their own rank and dignity by the splendour of their equipments.

And the same trait, which had been so often noticed in Savages, may be observed also, though in a less degree, among the uneducated classes in civilized communities. In persons of refinement, the original tendency to receive pleasing emotions from the contemplation of colours seems to have, in a measure, lost its power, in consequence of the developement of tendencies to receive pleasure from other causes.

(3) We have another proof in persons, who have been blind from birth, but in after life have been restored by couching, or some other way. "I have couched, (says Wardrop, speaking of James Mitchell,) one of his eyes

successfully; and he is much amused with the visible world, though he mistrusts information, gained by that avenue. One day I got him a new and *gaudy* suit of clothes, which delighted him beyond description. It was the most interesting scene of sensual gratification I ever beheld."*

§. 379. *Of sounds considered as a source of beauty.*

We next inquire into the application of these principles in respect to sounds. And here also we have reason to believe, that they hold good; that certain sounds are pleasing of themselves; and are hence, agreeably to views already expressed, termed BEAUTIFUL. Examine, for instance, musical sounds.——It is true, that in different nations, we find different casts or styles of music; but notwithstanding this, certain successions of sounds, viz. those which have certain mathematical proportions in their times of vibration, are alone pleasing. As, therefore, not all series of sounds are beautiful, but only those of a particular character, and these are every where found to excite emotions of beauty without exception; the presumption is, that they possess this power originally; they please us because the mind is so formed, that it cannot be otherwise. It is possible, that the emotion may be small, but it undoubtedly has an existence in some degree, and can be accounted for in no other way.

So true is this, and so obvious to every one's notice, that we can hardly be expected to attempt a confirmation of it by an appeal to any facts in particular. If it were necessary, well established facts would not be wanting. How many instances might be pointed out, like that of the Spaniards when they first came to America. In their traffic with the native inhabitants, the latter frequently purchased of them small bells; and it is asserted, that when they hung them on their persons, and heard their clear musical sounds, responding to their movements as

* As quoted by Mr. Stewart in his account of Mitchell, Vol. III. of the Elements of the Philosophy of the Mind.

they danced, they were filled with extacy; nothing could exceed their wild delight. It is further related of one of the Jesuit missionaries at a later period, that once coming into the company of certain ignorant and fierce Indians, he met with a rude and menacing reception, which foreboded no very favourable termination. As it was not his design, however, to enter into any contention, if it could possibly be avoided, he immediately commenced playing on a stringed instrument; their feelings were softened at once, and the evil spirit of jealousy and anger, which they exhibited on his first approach to them, fled from their minds.*

It is not necessary in this inquiry to look solely to highly civilized life, to the productions of the great masters of musical compositions, to companies of the most skilful performers, who on set and great occasions extract such strong admiration by "dulcet symphonies and voices sweet;" we wish rather to interrogate human nature in its rude estate, and we shall find it giving but one answer. Let some wandering musician suddenly take up his quarters in a country village, and enact the Orpheus even on a hand-organ, if it be one of tolerable excellence of construction; and as the swell of harmony sweeps along the street, it comes with a power, which reminds one of the marvels of ancient fable; the faces of those, who stand in the corners of the streets, are directed towards the sound; groups of children leave their sports and emulously rush to the spot; delighted countenances cluster at the windows; the din of conversation and the noisy activity of business is hushed, and the very trees seem to nod with approbation. Such is the potency of music; such is the charm of sweet sounds, coming forth not under the most favourable circumstances, to sooth and control, to refine and exalt and govern human passion.

* See Irving's Life and Voyages of Columbus, Chap. IX, London Quarterly Review, Vol. XXVI, p, 287.

§. 380. *Of motion as an element of beauty.*

Motion has usually been reckoned an element of beauty, and very justly.——A forest, or a field of grain, gently waved by the wind, affects us pleasantly. The motion of a winding river pleases; and this, not only because the river is serpentine, but because it is never at rest. We are delighted with the motion of a ship, as it cleaves the sea under full sail. We look on, as it moves like a thing of life, and are pleased without being able to control our feelings, or to tell, why they exist. And the waves too around it, which are contiuually approaching and departing, and curling upward in huge masses, and then breaking asunder into fragments of every shape, present a much more pleasing appearance, than they would, if profoundly quiet and stagnant.

With what happy enthusiasm we behold the foaming cascade, as it breaks out from the summit of the mountain, and dashes downward to its base! With what pleasing satisfaction, we gaze upon a column of smoke, ascending from a cottage in a wood;—a trait in outward scenery, which landscape painters, who must certainly be accounted good judges of what is beautiful in the aspects of external nature, are exceedingly fond of introducing. It may be said in this case, we are aware, that the pleasure, arising from beholding the ascending smoke of the cottage, is caused by the favourite suggestions, which are connected with it, of rural seclusion, peace, and abundance. But there is much reason to believe, that the feeling would be to some extent the same, if it were known to ascend from the uncomfortable wigwam of the Savage, from an accidental conflagration, or from the fires of a wandering horde of gypsies.——And if motion, on the limited scale, on which we are accustomed to view it, be beautiful, how great would be the expansion and extacy of our feelings, if we could be placed on some pinnacle of the universe, and behold beneath us the worlds, suns, and systems of infinite space, with endless progress and perfect

regularity, "wheeling unshaken through the void immense."

§. 381. *Of intellectual and moral objects as a source of the beautiful.*

But we are not to suppose, that there is nothing but matter, and its relations, and its accessories of rest, motion, and sound, which are the foundations of the beautiful. The world of mind also, so far as it can be brought before our contemplation, calls forth similar emotions.——The human countenance is a beautiful object; nature has decidedly given that character to the curving outline of the lips and forehead, the gentle illuminations of the eye, and the tints of the cheeks, but they convey ideas of mind; they may be regarded as natural indications and signs of the soul, which is lodged behind them; and although the human countenance is pleasing of itself, the thought and feeling and amiability, of which it is significant, are pleasing also. We may perhaps illustrate our meaning by another instance. If we fix our attention upon two men, whose outward appearance is the same, but one of them is far more distinguished than the other for clearness of perception, extent of knowledge, and all the essentials of true wisdom, we certainly look upon him with a higher degree of complacency. And this complacency is greatly heightened, if we can add to these intellectual qualities certain qualities of the heart or of the moral character, such as a strong love of truth, justice, and benevolence.

It is true, that in the present life intellectual and moral objects are brought before our contemplation only in a comparatively small degree, surrounded and almost encumbered, as we are, with material things; but they are, nevertheless, proper objects of knowledge, and are among the great sources of beauty. There is no object of contemplation more pleasing or even enrapturing than the Supreme Being; but in contemplating the Deity, we do not contemplate an outward and accessible picture, or a statue of wood and stone, but merely a complex internal conception, which embraces certain intel-

lectual and moral qualities and powers, and excludes every thing of a purely material kind. Now when we dwell upon the parts of this great and glorious conception, and follow them out into the length and breadth, and height and depth of infinite wisdom, of infinite benevolence, of omnipotence and justice unsearchable, and of other attributes, which are merged together and assimilated in this great sun of moral perfection, we find such a splendour and such a fitness in them, that we cannot but be filled with delight; like the disciples, that were travelling to Emmaus, when we think upon these things, our heart burns within us.

CHAPTER SECOND.

OF ASSOCIATED BEAUTY.

§. 382. *Objects may become beautiful by association merely.*

THERE is another view to be taken of this interesting subject. While some of the forms, of which matter is susceptible, are pleasing of themselves and originally, while we are unable to behold bright colours, and to listen to certain sounds, and to gaze upon particular expressions of the countenance, and to contemplate high intellectual and moral excellence, without emotions, in a greater or less degree delightful; it must be admitted, that, in the course of our experience, we find a variety of objects, that seem, as they are presented to us, to be unattended with any emotion whatever; objects, that are perfectly indifferent. And yet these objects, however wanting in beauty to the great mass of men, are found to be invested, in the minds of some, with a charm, allowedly not their own. These objects, which previously excited no feelings of beauty, may become beautiful to us in consequence of the associations, which we attach to them. That is to say, when the objects are beheld, certain former pleasing feelings, peculiar to ourselves, are recalled.

The lustre of a spring morning, the radiance of a summer evening may of themselves excite in us a pleasing emotion; but as our busy imagination, taking advantage of the images of delight, which are before us, is ever at work and constantly forming new images, there is, in combination with the original emotion of beauty, a superadded delight. And if, in these instances, only a part of the beauty is to be ascribed to association, there are some others, where the whole is to be considered, as derived from that source.

Numerous instances can be given of the power of association, not only in heightening the actual charms of objects, but in spreading a sort of delegated lustre around those, that were entirely uninteresting before. Why does yon decaying house appear beautiful to me, which is indifferent to another? Why are the desolate fields around it clothed with delight, while others see in them nothing, that is pleasant? It is, because that house formerly detained me, as one of its inmates, at its fireside, and those fields were the scenes of many youthful sports. When I now behold them, after so long a time, the joyous emotions, which the remembrances of my early days call up within me, are, by the power of association, thrown around the objects, which are the cause of the remembrances.

§. 383. *Further illustrations of associated feelings.*

He, who travels through a well-cultivated country town, cannot but be pleased with the various objects, which he beholds; the neat and comfortable dwellings; the meadows, that are peopled with flocks, and with herds of cattle; the fields of grain, intermingled with reaches of thick and dark forest. The whole scene is a beautiful one; the emotion we suppose to be partly original; a person on being restored to sight by couching for the cataract, and having had no opportunity to form associations with it, would witness it for the first time with delight. But a greater part of the pleasure is owing to the associated feelings, which arise, on beholding such a scene;

these dwellings are the abode of man; these fields are the place of his labours, and amply reward him for his toil; here are contentment, the interchange of heartfelt joys, and "ancient truth."

Those, who have travelled over places, that have been signalized by memorable events, will not suspect us of attributing too great a share of our emotions to association. It is true that in a country so new as America, we are unable to point so frequently, as an European might do, to places, that have witnessed the gallantry and patriotism of ancient times. But there are some such consecrated spots. With whatever emotions the traveller may pass up the banks of the Hudson, he cannot but find his feelings much more deeply arrested at Stillwater and at Saratoga, the scenes of memorable battles with the armies of England and of the surrender of Burgoyne, than at any other places. It was there, that brave men died; it was there, that an infant people threw defiance at a powerful enemy, and gave sanguinary proof of their determination to be free. A thousand recollections have gathered upon such places, and the heart overflows with feeling at beholding them.

The powerful feeling, which here exists, whether we call it an emotion of beauty, or sublimity, or give it a name, expressive of some intermediate grade, is essentially the same with that, which is caused in the bosom of the traveller, when he looks for the first time upon the hills of the city of Rome. There are other cities of greater extent, and washed by nobler rivers, than the one, which is before him; but upon no others has he ever gazed with such intensity of feeling. He beholds what was once the mistress of the world; he looks upon the ancient dwelling place of Brutus, of Cicero, and of the Cæsars. The imagination is at once peopled with whatever was noble in the character, and great in the achievements of that extraordinary nation; and there is a strength, a fullness of emotion, which, without these stirring remembrances, would be very sensibly diminished.

§. 381. *Instances of national association.*

The influence of association in rousing up, and in giving strength to particular classes of emotions, may be strikingly seen in some national instances.——Every country has its favourite tunes. These excite a much stronger feeling in the native inhabitants, than in strangers. The effect on the Swiss soldiers of the Ranz des Vaches, their national air, whenever they have happened to hear it in foreign lands, has often been mentioned. So great was this effect, that it was found necessary in France, to forbid its being played in the Swiss corps in the employment of the French government. The powerful effect of this song cannot be supposed to be owing to any peculiar merits in the composition; but to the pleasing recollections, which it ever vividly brings up in the minds of the Swiss, of mountain life, of freedom, and domestic pleasures.

The English have a popular tune, called Belleisle March. Its popularity is said to have been owing to the circumstance, that it was played when the English army marched into Belleisle, and to its consequent association with remembrances of war and of conquest. And it will be found true of all national airs, that they have a charm for the natives of the country, in consequence of the recollections connected with them, which they do not possess for the inhabitants of other countries.

We have abundant illustrations of the same fact in respect to colours. The purple colour has acquired an expression or character of dignity, in consequence of having been the common colour of the dress of kings; among the Chinese, however, yellow is the most dignified colour, and evidently for no other reason, than because yellow is that, which is allotted to the royal family. In many countries, black is expressive of gravity, and is used particularly in seasons of distress and mourning; and white is a cheerful colour. But among the Chinese white is gloomy, because it is the dress of mourners; and in Spain and

among the Venetians black has a cheerful expression, in consequence of its being worn by the great.

Many other illustrations to the same purpose might be brought forward. The effect of association is not unfrequently such as to suppress entirely and throw out the original character of an object, and substitute a new one in its stead. Who has not felt, both in man and woman, that a single crime, that even one unhappy deed of meanness or dishonour is capable of throwing a darkness and distortion over the charms of the most perfect form? The glory seems to have departed : and no effort of reasoning or of imagination can fully restore it.

§. 385. *Differences of original susceptibility of this emotion.*

Supposing it to be true, that we possess an original susceptibility of emotions of beauty, independently of association and of considerations of mere utility, it seems, however, to be the fact, that this susceptibility is found existing in different degrees in different persons. Let the same beautiful objects be presented to two persons, and one will be found not only to be affected, but ravished, as it were, with feelings of beauty ; while the other will have the same kind of emotions, but in a very diminished degree.——A great degree of susceptibility of emotions of beauty is usually termed SENSIBILITY.

The differences of men in this respect may justly be thought, where we cannot account for it by any thing in their education or mental culture, to be constitutional. Nor is it more strange, that men should be differently affected by the same beautiful objects, in consequence of some difference of constitution, than that they should constitutionally have different passions; that one should be choleric, another of a peaceable turn ; that one should be mild and yielding another inflexible.

§. 386. *Summary of views in regard to the beautiful.*

As the subject of emotions of beauty is one of no small difficulty, it may be of advantage to give here a brief summary of some of the prominent views in respect to it.

(1) Of emotions of beauty it is difficult to give a definition, but we notice in them two marks or characteristics;—They imply first, a degree of pleasure, and 2dly, are always referred by us to an external object.

(2) No objects are beautiful of themselves, and independently of the soul, which contemplates them, (unless perhaps reason should be found for making an exception in favour of purely intellectual and moral objects,) but nevertheless they appear to have a degree of splendour or beauty in consequence of our having reflected back upon them, constantly, and from a very early period, the feelings, which exist in our own minds.

(3) The feeling, which we term an emotion of beauty, is not limited to natural scenery, but may be caused by works of art, by creations of the imagination, by the severest efforts of reasoning, and by the various forms of intellectual and moral nature, so far as they can be presented to the mind. On all these the mind may reflect back the lustre of its own emotions, and make them beam out with a species of splendour, whether there be any originally in the objects or not; and this is done in the same manner, as when we diffuse our sensations of colour, which are merely affections of the mind, over the objects, which we call red, white, yellow, &c.

(4) There is in the mind an original susceptibility of emotions in general, and of those of beauty in particular; and not only this, some objects are found, in the constitution of things, to be followed by these feelings of beauty, while others are not; and such objects are spoken of as being originally beautiful. That is, when the object is presented to the mind, it is of itself followed by emotions of beauty, without being aided by the influence of accessory and contingent circumstances.

(5) Without pretending to certainty in fixing upon those objects, to which, what is termed original or primary beauty may be ascribed, there appears to be no small reason, in attributing it to certain forms, to sounds of a particular character, to bright colours, and to intellectual and moral excellence in general.

(6) Many objects, which cannot be considered beautiful of themselves, become such by being associated with a variety of former pleasing and enlivening recollections; and such, as possess beauty of themselves, may augment the pleasing emotions from the same cause. Also much of the difference of opinion, which exists as to what objects are beautiful, and what are not, is to be ascribed to association.

§. 387. *Of picturesque beauty.*

We apply the term PICTURESQUE to whatever objects cause in us emotions of beauty, in which the beauty does not consist in a single circumstance by itself, but in a considerable number, in a happy state of combination. The meaning of the term is analogous to the signification of some others of a like termination, which are derived to us from the Italian through the medium of the French. Mr. Stewart remarks of the word, *arabesque*, that it expresses something in the style of the Arabians; *moresque*, something in the style of the Moors; and *grotesque*, something which bears a resemblance to certain whimsical delineations in a grotto or subterranean apartment at Rome. In like manner, *picturesque*, originally implied what is done in the style and spirit of a painter, who ordinarily places before us an object made up of a number of circumstances, in such a state of combination as to give pleasure.

The epithet may be applied to paintings, to natural scenery, poetical descriptions, &c.——The following description from Thompson, which assembles together some of the circumstances, attending the cold, frosty nights of winter, is highly picturesque.

"Loud rings the frozen earth and hard reflects
"A double noise; while, at his evening watch,
"The village dog deters the nightly thief;
"The heifer lows; the distant waterfall
"Swells in the breeze; and with the hasty tread
"Of traveller, the hollow sounding plain
"Shakes from afar."

CHAPTER THIRD.

EMOTIONS OF SUBLIMITY.

§. 388. *Connection between beauty and sublimity.*

THOSE emotions, which we designate as SUBLIME, are a class of feelings, which have much in common with emotions of beauty; they do not differ so much in nature or kind, as in degree. When we examine the feelings, which go under these two designations, we readily perceive, that they have a progression; that there are numerous degrees in point of intensity; but the emotion, although more vivid in one case than the other, and mingled with some foreign elements, is for the most part essentially the same. So that it is, by no means, impossible to trace a connection even between the fainter feelings of beauty, and the most overwhelming emotions of the sublime.

This progression of our feelings from one, that is gentle and pleasant, to one, that is powerful and even painful, has been happily illustrated in the case of a person, who is supposed to behold a river at its first rise in the mountains, and to follow it, as it winds and enlarges in the subjacent plains, and to behold it at last losing itself in the expanse of the ocean. For a time the feelings, which are excited within him, as he gazes on the prospect, are what are termed emotions of beauty. As the small stream, which had hitherto played in the uplands and amid foliage, that

almost hid it from his view, increases its waters, separates its banks to a great distance from each other, and becomes the majestic river, his feelings are of a more powerful kind. We often, by way of distinction, speak of the feelings existing under such circumstances, as emotions of grandeur. At last it expands and disappears in the immensity of the ocean: the vast, illimitable world of billows flashes in the sight. Then the emotion, widening and strengthening with the magnitude and energy of the objects, which accompany it, becomes sublime.——Emotions of sublimity, therefore, chiefly differ, at least in most instances, from those of beauty in being more vivid and powerful.

§. 389. *Occasions of emotions of sublimity.—Vast extent and height.*

As the nature of sublime emotions is a matter of each one's individual consciousness, and cannot be made perfectly clear to the comprehension of others by any mere description or definition, it will aid in the better understanding of them, if we mention some of the occasions on which they arise.——Among other occasions, this emotion is found to exist, whenever it happens, that we have our attention called to objects of vast extent. Accordingly mountains of great altitude, the celestial vault, when seen from high summits, vast plains, beheld from a commanding position, the ocean, &c.. affect us with sublime emotions.

The ancients were in the habit of throwing together heaps of stones in commemoration of individuals or of some great events. The contemplation of such an heap, if it were one of small magnitude, would not be attended with sublime emotions; but probably it would become such in some degree, if it were increased to the size of an Egyptian pyramid. So that we may regard mere expansion or enlargement, whether we find it in the works of nature or art, an element of the sublime.

Mere height, independently of considerations of expansion or extent, appears also to constitute an occasion

of the sublime. Every one has experienced this, when standing at the base of a very steep and lofty cliff, hill, or mountain. Travellers have often spoken of the sublime emotion, occasioned by viewing the celebrated Natural Bridge in Virginia, from the bottom of the deep ravine, over which it is thrown. This bridge is a single solid rock, about sixty feet broad, ninety feet long, and forty thick. It is suspended over the head of the spectator, who views it from the bottom of the narrow glen, at the elevation of two hundred and thirty feet; an immense height for such an object. It is not in human nature to behold without strong feeling such a vast vault of solid lime-stone, springing lightly into the blue upper air, and remaining thus outstreched, as if it were the arm of the Almighty himself, silent, unchangeable, and eternal.

When we are placed on the summit of any high object, and look downward, the effect on the mind is nearly the same. The sailor on the wide ocean, when in the solitary watches of the night he casts his eye upward to the lofty illumined sky, has a sublime emotion; and he feels the same strong sentiment stirring within him, when a moment afterwards he thinks of the vast, unfathomable abyss beneath him, over which he is suspended by the frail plank of his vessel. No one can read Shakspeare's description of Dover Cliffs, without feeling that there is a sublimity in the depths beneath, as well as in the heights above.

———"How fearful
"And dizzy 'tis, to cast one's eyes so low!
"The crows and choughs, that wing the midway air,
"Show scarce so gross as beetles. Half-way down
"Hangs one, that gathers samphire, dreadful trade!
"Methinks he seems no bigger than his head.
"The fishermen, that walk upon the beach,
"Appear like mice; and yon tall anchoring bark
"Diminished to her boat; her boat a buoy,
"Almost too small for sight. The murmuring surge,
"That on the unnumbered idle pebbles chafes,
"Cannot be heard so high. I'll look no more,

"Lest my brain turn, and the deficient sight
"Topple down headlong.

§. 390. *Indications of power attended by sublime emotions.*

We also experience emotions of sublimity in the contemplation of all objects, which indicate great exertions of power; even when we have but very confused notions of that energy, which we know to be somehow put forth. Nothing can be more sublime, than a volcano throwing out from its bosom, clouds, and burning stones, and immense rivers of lava. An earthquake is sublime, when the strength of some invisible hand upturns the strong foundations both of art and nature. The ocean, greatly agitated with a storm, and tossing the largest navies, as if in sport, possesses an increase of sublimity, on account of the more striking indications of power, which it at such a time gives. The shock of large armies also, with the power to take away the life, which nothing but a greater power can give, is sublime. But in all these instances, as in most others, the sublime emotion cannot be ascribed solely to one cause; something is to be attributed to vast extent; something to the original effect of the brilliancy or darkness of colours; and something to feelings of dread and danger.

We often experience emotions of sublimity in witnessing objects, that move with very great swiftness. This is one source of the feelings, which we have at beholding bodies of water rushing violently down a cataract. For the same reason, the hurricane, that hastens onward with irresistible velocity, and lays waste whatever it meets, is sublime. And here also we find a cause of part of that sublime emotion, which men have often felt on seeing at a distance the electric fluid, darting from the cloud to the earth; and at witnessing the flight of a meteor.

§. 391. *Relation of the trait of sublimity to the emotions within.*

But natural objects are not sublime, any more than they are beautiful in themselves; in both cases, it is the mind of man and that alone, which gives them the sub-

limity they seem to possess of their own nature. It is true, all objects have certain inseparable characteristics or qualities, which exist independently of all other objects whether material or mental; but then on the other hand, these characteristics or qualities exhibit a new appearance, and possess a new efficacy with the establishment of every new relation. And it is no less true, that there is a fixed and established relation between material objects and the mind of man; they are, in an important sense, made for each other; there is a striking correspondence between them.

The hurricane, the cataract, the lightning, when resolved into their elements, are only a number of contiguous atoms. And yet it seems to be unalterably fixed in the constitution of things, that we cannot behold them without strong feeling. The emotions, which we feel, are diffused by us over the objects, that are their cause or more properly are antecedent to them; and this diffusion will be found to be all, that constitutes their sublimity. When we speak of the summits of the Alps, of the ocean, of a meteor, of the cataract of Niagara, of Vesuvius in flames, or other objects in nature as being sublime, the epithet is evidently applied in reference to those feelings, which the objects excite within us. It cannot be presumed; that we should call them thus, if they were perfectly indifferent to us.

§. 392. *Sublime objects have some elements of beauty.*

We have seen, that a regular progression may, in most instances, be traced from the beautiful to the sublime. It seems, therefore, to follow, that instances of the sublime will, on the removal of some circumstances, possess more or less of the beautiful. And this, on examination, will be found to be generally the case. Take, as an example, the shock of powerful armies, which is confessedly a sublime scene. We have only to remove the circumstance of slaughter; and at once the regular order of the troops, their splendid dress and rapid movements, together with the floating of banners and the sound of music, are ex-

ceedingly picturesque and beautiful; nothing more so. And all this is none the less beautiful, when thousands are falling and dying in actual contest; although the painful emotion, consequent on witnessing a scene of slaughter, so much overpowers the sense of the beautiful, that it appears even not to have an existence. If the engagement between the armies should be without the accompaniments of military dress, and without order, and without strains of music, but a mere struggle between man and man, with such arms as came readiest into their power, the scene, however destructive, would be any thing rather than sublime. ——Diminish the force of the whirlwind to that of the gentle breeze, and as it playfully sweeps by us, we feel that emotion of pleasure, which is an element of the beautiful. And so when the mighty cataract is dwindled down to the cascade, we shall discover, that the tumultuous emotions of the sublime are converted into the gentler feelings of beauty.

§. 393. *Of the original or primary sublimity of objects.*

If there be a connection between the beautiful and sublime, if beauty, grandeur, and sublimity are only names for various emotions, not so much differing in kind, as in degree; essentially the same views, which were advanced in respect to beauty, will hold here. It will follow, that if the contemplation of some objects is attended with emotions of beauty, independently of associated feelings; or, in other words, if they have a primary or original beauty, that there are objects also originally sublime. Hence we may conclude, that whatever has great height, or great depth, or vast extent, or other attributes of the sublime, will be able to excite in us emotions of sublimity of themselves, independently of the subordinate or secondary aid, arising from any connected feelings.

§. 394. *Proofs of the original sublimity of objects.*

It may be inferred, that there is such primary or original sublimity, not only in view of the connection, which has been stated to exist between the beautiful and sub-

lime, but because it is no doubt agreeable to the common experience of men. But in resting the proposition, (where undoubtedly it ought to rest,) on experience, we must inquire, as in former chapters, into the feelings of the young. And this, for the obvious reason, that, when persons are somewhat advanced in age, it is difficult to separate the primary from the secondary or associated sublimity. They have then become inextricably mingled together.——Now take a child, and place him suddenly on the shore of the ocean, or in full sight of darkly wooded mountains of great altitude, or before the clouds and fires and thunders of volcanoes; and, in most cases, he will be filled with sublime emotions; his mind will swell at the perception; it will heave to and fro, like the ocean *itself* in a tempest. His eye, his countenance, his gestures will indicate a power of internal feeling, which the limited language he can command is unable to express. This may well be stated as a fact, because it has been frequently noticed by those, who are competent to observe.

Again, if a person can succeed in conveying to a child by means of words sublime ideas of whatever kind, similar emotions will be found to exist, although generally in a less degree, than when the objects are directly presented to the senses. By way of confirming this, a statement of the younger Lord Lyttleton, who seems to have been naturally a person of much sensibility, may be appealed to. "Of all the poets (says that writer) who have graced ancient times, or delighted the latter ages, Milton is my favourite. I was quite a boy, when, in reading Paradise Lost, I was so forcibly struck with a passage, that I laid down the book with some violence on the table, and took an hasty turn to the other end of the room. Your curiosity may naturally expect to be gratified with the passage in question. I quote it, therefore, for your reflection and amusement."

"He spake; and to confirm his words, out-flew
"Millions of flaming swords, drawn from the thighs
"Of mighty Cherubim; the sudden blaze
"Far round illumined Hell."*

*Letters of the late Lord Lyttleton, xxvi.

§, 395. *Influence of association on emotions of sublimity.*

Granting, that the sublime emotion is in part original, till a great share of it is to be attributed to association. As an illustration, we may refer to the effects of sounds. When a sound suggests ideas of danger, as the report of artillery, and the howling of a storm; when it calls up recollections of mighty power, as the fall of a cataract, and the rumbling of an earthquake, the emotion of sublimity, which we feel, is greatly increased by such suggestions. Few simple sounds are thought to have more of sublimity, than the report of a cannon; but how different, how much greater the strength of feeling, than on other occasions, whenever we hear it coming to us from the fields of actual conflict! Many sounds, which are in themselves inconsiderable, and are not much different from many others, to which we do not attach the character of sublimity, become highly sublime by association. There is frequently a low feeble sound, preceding the coming of a storm, which has this character.

"Along the woods, along the moorish fens,
"Sighs the sad genius of the coming storm,
"Resounding long in fancy's listening ear.

Thompson's Winter.

It is sometimes the case, that people, whose sensibilities are much alive to thunder, mistake for it some common sounds, such as the noise of a carriage, or the rumbling of a cart. While they are under this mistake, they feel these sounds as sublime; because they associate with them all those ideas of danger and of mighty power, which they customarily associate with thunder. The hoot of the owl at midnight is sublime chiefly by association; also the scream of the eagle, heard amid rocks and deserts. The latter is particularly expressive of fierce and lonely independence; and both are connected in our remembrance with some striking poetical passages.

§. 395 *Further illustrations of sublimity from association.*

The same results will be found to hold good in other cases. The sight of broken and heavy masses of dark clouds, driven about by the wind, is sublime. But how much more fruitful of emotion to those, who, in the days of Fingal and Ossian, saw them, in their piercing imaginations, peopled with the ghosts of the dead; with the assemblies of those, whose renown had continued to live long after their bodies had mouldered!——"Temora's woods shook with the blast of the inconstant wind. A cloud gathered in the west. A red star looked from behind its edge. I stood in the wood alone; I saw a ghost on the darkened air; his stride extended from hill to hill. His shield was dim on his side. It was the son of Semo."*

A view of the Egyptian pyramids animates us with sublime emotions; it is impossible to behold such vast efforts of human power, and be unmoved; but the strength of these feelings is increased by means of the solemn recollection, that they have stood unshaken, while successive generations have flourished and perished at their feet, and by their being connected with many ideas of ancient magnificence, of unknown kings, and with numerous incidents in the history of a people, once famous for opulence and the arts, but now no longer an independent nation. Mount Sinai in Arabia Petræa is a rocky pile of considerable altitude, and like other summits must have always excited some emotion in those, who beheld it; but when it is seen by a Christian traveller, the sublime emotion is greatly increased by the recollection of the important place, which this summit holds in the history of the Jews, and of its consequent connection with the belief and the hopes of all those who embrace the religion of the Saviour.

* Ossian, Epic Poem of Temora, Bk. I.

CHAPTER FOURTH.

EMOTIONS OF THE LUDICROUS.

§. 396. *General nature of emotions of the ludicrous.*

In prosecuting the general subject of emotions, we are next to consider another well known class, which are of a character somewhat peculiar, viz. *emotions of the ludicrous.*

It is difficult to give a precise definition of this feeling, although the same may be said of it, as in respect to emotions of beauty, that it is a pleasant or delightful one. But the pleasure, which we experience, receives a peculiar modification, and one which cannot be fully conveyed in words, in consequence of our perception of some incongruity in the person or thing, which is the cause of it.

In this case, as in many other inquiries in mental philosophy, we are obliged to rely chiefly on our own consciousness, and our knowledge of what takes place in ourselves.

§. 397. *Occasions of emotions of the ludicrous.*

It may, however, assist us in the better understanding of them, if we say something of the occasions, on which the emotions of the ludicrous are generally found to arise. And among other things it is exceedingly clear, that this feeling is never experienced, except when we notice something, either in thoughts, or in outward objects and actions, which is unexpected and uncommon. That is to

say, whenever this emotion is felt, there is always an unexpected discovery by us of some new relations.——But then it must be observed, that the feeling in question does not necessarily exist in consequence of the discovery of such new relations merely. Something more is necessary, as may be very readily seen.

Thus, we are sometimes, in the physical sciences, presented with unexpected and novel combinations of the properties and qualities of bodies. But whenever we discover in those sciences relations in objects, which were not only unknown, but unsuspected, we find no emotion of ludicrousness, although we are very pleasantly surprised. Again, similies, metaphors, and other like figures of speech imply in general some new and unexpected relations of ideas. It is this trait in them, which gives them their chief force. But when employed in serious compositions, they are of a character far from being ludicrous.

Hence we infer, that emotions of ludricrousness do not exist on the discovery of new and unexpected relations, unless there is at the same time a perception, or supposed perception of some incongruity or unsuitableness. Such perception of unsuitableness may be expected to give to the whole emotion a new and specific character, which every one is acquainted with from his own experience, but which, as before intimated, it is difficult to express in words.

§. 398. *Of what is to be understood by wit.*

The subject of emotions of the ludicrous is closely connected with what is termed Wit. This last named subject, therefore, which it is of some importance to understand, naturally proposes itself for consideration in this place. In regard to WIT, as the term is generally understood at the present time, there is ground to apprehend, that an emotion of the ludicrous is always, in a greater or less degree, experienced in every instance of it.

This being the case, we are led to give this definition, viz., WIT consists in suddenly presenting to the mind an

assemblage of related ideas of such a kind as to occasion feelings of the ludicrous.——This is done in a variety of ways; and among others in the two following.

§. 399. *Of wit as it consists in burlesque or in debasing objects.*

The first method, which wit employs in exciting the feeling of the ludicrous, is, by debasing those things, which are grand and imposing; especially those, which have an appearance of greater weight and gravity and splendour, than they are truly entitled to. Descriptions of this sort are termed burlesque.

An attempt to lesson what is truly and confessedly serious and important, has in general an unpleasant effect, very different from that which is caused by true wit. And yet it is the case, that objects and actions truly great and sublime may sometimes be so coupled with other objects, or be represented in such new circumstances as to excite very different feelings from what they would otherwise. Among the various sayings of the great Emperor Napoleon, none is more true, than his very appropriate remark to the Abbe de Pradt, at the time of his secret flight on a sledge through Poland and Prussia, that there is but a single step from the sublime to the ridiculous.

In the practice of burlesque, as on all other occasions of wit, there is a sudden and uncommon assemblage of related ideas. Sometimes this assemblage is made by means of a formal comparison. Take as an instance the following comparison from Hudibras;

"And now had Phœbus in the lap
"Of Thetis taken out his nap;
"And, like a lobster boiled, the morn
"From black to red began to turn.

We find illustrations of burlesque also in those instances, where objects of real dignity and importance are coupled with things mean and contemptible, although there is no direct and formal comparison made. As in this instance from the above mentioned book;

"For when the restless Greeks sat down
"So many years before Troy-town,
"And were renowned, as Homer writes,
"For well-soaled boots, no less than fights.

In these instances we have related ideas. In the first, there is undoubtedly an analogy between a lobster and the morning, in the particular of its turning from dark to red; but however real it may be, it strikes every one, as a singular and unexpected resemblance. In the other passage, it is not clear, that Butler has done any thing more than Homer in associating the renown of the Greeks with their boots, as well as their valour. But to us of the present day the connection of ideas is hardly less uncommon, and singular, not to say incongruous, than in the former.

§. 400. *Of wit when employed in aggrandizing objects.*

The second method which wit employs in exciting emotions of the ludicrous is by aggrandizing objects, which are in themselves inconsiderable. This species of wit may be suitably termed *mock-majestic* or *mock-heroic*. While the former kind delights in low expressions, this is the reverse, and chooses learned words, and sonorous combinations. In the following spirited passage of Pope, the writer compares dunces to gods, and Grub-street to heaven.

"As Berecynthia, while her offspring vie
"In homage to the mother of the sky,
"Surveys around her in the blest abode
"An hundred sons, and every son a god;
"Not with less glory mighty Dulness crowned,
"Shall take through Grub-street her triumphant round;
"And her Parnassus glancing o'er at once,
"Behold a hundred sons, and each a dunce.

In this division of wit are to be included those instances, where grave and weighty reflections are made upon mere trifles. In this case as in others, the ideas are in some respects related, or have something in common; but the grouping of them is so curious and unexpected, that

we cannot observe it without considerable emotion.

"My galligaskins, that have long withstood
"The winter's fury and encroaching frosts,
"By time subdued, (*what will not time subdue*!)
"An horrid chasm disclose.

It may be proper to make the remark in this place, which is applicable to wit in all its forms, that many sayings, which would otherwise have appeared to us witty, lose no small share of their intended effect, whenever we are led to suspect, that they were premeditated. Hence an observation or allusion, which would be well received in conversation, would often be insipid in print; and it is for the same reason, that we receive more pleasure from a witty repartee, than a witty attack. Our surprise at the sudden developement of intellectual acuteness is much greater at such times.

§. 401. *Of other methods of exciting emotions of the ludicrous.*

But it is not to be supposed, that wit is limited to the methods of assembling together incongruous ideas, which have just been referred to. A person of genuine wit will excite emotions of the ludicrous in a thousand ways, and which will be so diverse from each other, that it will be found exceedingly difficult to subject them to any rules. It would be difficult, for instance, to bring within any established classification of the specific sources of wit, many passages of the poet Butler. In the first Canto of his poem of Hudibras, we have a particular account of the hero's horse; in which the writer very singularly compares the animal to a Spaniard in majesty and deliberation of gait, and in some other respects to the celebrated horse of Cæsar as follows—

"He was well stay'd, and in his gait
"Preserved a grave, majestic state.
"At spur or switch no more he skipt,
"Or mended pace, than Spaniard whipt;
"And yet so fiery he would bound,

"As if he grieved to touch the ground.
"That Cæsar's horse, who, as fame goes,
"Had corns upon his feet and toes,
"Was not by half so tender hoofs,
"Or trod upon the ground so soft;
"And as that beast would kneel and stoop,
"(Some write) to take his rider up,
"So Hudibras's, ('tis well known)
"Would do the same, to set him down.

§. 402. *Of the character and occasions of humour.*

Closely connected with the general subject of ludicrous emotions and of wit, is that of Humour. It is well known, that we often apply the terms, *humour* and *humorous* to descriptions of a particular character whether written, or given in conversation; and which may be explained as follows.

It so happens that we frequently find among men what seems to us a disproportion in their passions; for instance, when they are noisy and violent, but not durable. We find inconsistencies, contradictions, and disproportions in their actions. They have their foibles, (hardly any one is without them,) such as self-conceit, caprice, foolish partialities, jealousies, &c. Such incongruities in feeling and action cause an emotion of surprise, like an unexpected combination of ideas in wit. Observing them as we do in connection with the acknowledged high traits and responsibilities of human nature, we can no more refrain from an emotion of the ludicrous, than we can on seeing a gentleman of fine clothes and high dignity making a false step, and tumbling into a gutter. A person, who can seize upon these specialities in temper and conduct, and set them forth in a lively and exact manner, is called a man of humour; and his descriptions are termed humorous descriptions.——*See Campbell's Philosophy of Rhetoric, Bk. I, ch. III: Beattie on Laughter and Ludicrous Composition, &c.*

CHAPTER FIFTH.

MORAL EMOTIONS. CONSCIENCE.

§. 403. *Of the accountableness or moral nature of man.*

MAN is accountable to his Creator; for accountableness implies a superior, and evidently the highest claims to superintendence and government exist in the Supreme Being. When he does right, he is approved; when he does wrong, he is condemned. To say that he is a moral being, is in effect the same as to say, that he is accountable, or that he is capable of doing right or wrong. It is in this respect he clearly differs, (and the degree of difference is great in itself and incalculable in its results,) from the forms of life around him, from the beast of the field, and from the bird of heaven. His accountableness gives him a new character; it imparts to his natural existence, which he has in common with the brutes, a superadded and nobler existence, which he has in common with angels.

It is necessarily involved and implied in the moral character of man, that some things are right and others wrong, that some are good and others evil. Moral good and evil are also expressed by the terms, merit and de-

merit, virtue and vice, good and ill desert, and many other terms of a like import, which are to be found in all languages.

§. 404. *Immutability of moral distinctions.*

Between moral merit and demerit, between virtue and vice, there is a real, permanent, and immutable distinction. That is, whatever actions are generally approved by men can never be otherwise than approved by them, while their mental constitution remains the same, as at present. On the other hand, whatever actions are generally disapproved, can never be otherwise, while the same constitution remains. Vice can never become virtue; virtue can never become vice. Good can never become evil, nor evil become good; though virtue may take the place of vice, and good of evil.——And even if man's constitution should be changed, and the nature of his moral emotions be altered, the permanent distinction of right and wrong would not necessarily be annulled. But this view of the subject will be more particularly considered in a future chapter.

§. 405. *Of the existence of a moral susceptibility or conscience.*

On carefully examining the mental constitution, we are soon led to perceive that there is in man a moral susceptibility or conscience. If there be original feelings of approval or disapproval, sanctioning when we do right, and condemning when we do wrong, there must of course be something in the internal constitution, corresponding to such results. There must be something in the mind, from which they proceed.

The effect of this susceptibility in reference to ourselves is, we are conscious, according as we act one way or another, of an internal sanctioning or condemnation, approval or disapproval. Its effect, when we are not in action ourselves, but are noticing the conduct of others, is the same; at sometimes we approve, at others condemn. Whereas if we were destitute of this susceptibility, (other-

wise called CONSCIENCE,) this very conduct and these very agents, which have now a moral character so decided, would appear to us utterly indifferent. This susceptibility, therefore, is in one sense the great source of moral distinctions of right and wrong, of merit and demerit, of virtue and vice. That is to say, if we were destitute of the susceptibility, it would be utterly beyond our power to ascertain these important distinctions. The distinctions might exist, but it would seem beyond our ability to become acquainted with them. Our conscience is the means or instrument, which God has given us to ascertain the morality of actions, to know good from evil, the right from the wrong.

§. 406. *Of the various opinions respecting the ground of moral obligation.*

It is not to be concealed, however, that there has been a want of uniformity on this whole subject. Different writers have explained in different ways both the ultimate source and the developement of moral distinctions. Hence they have necessarily been divided as to the ground of moral obligation. One ascribes it to the moral fitness of things; another finds it in the decisions of reason; another in expediency, and in the promotion of the public good; another in Revelation. But after hearing these and other solutions of the ground of moral obligation, the question still returns, why does the regard for the public good, or a belief in Revelation, or the conclusions of reason render it right for me to do a particular action and wrong not to?

When such a question is put to us, we find ourselves driven back upon the feelings of our own hearts. Our Creator, in forming us with a susceptibility of emotions of approval or disapproval, has furnished us with a guide in the discharge of our duties to Him, to our fellow beings, to ourselves. Without this susceptibility, this inward feeling, this CONSCIENCE, men would experience no regret and compunction even in disobeying the express commands of God himself. Without the susceptibility of

moral emotions, it would be all the same, whether they regarded or disregarded the most affecting calls of charity and of the public good. Without this, benevolent intercourse would cease; religious homage would be at at an end; the bonds of society would be loosed and dissolved.

The true source, then, of moral obligation is in the natural impulses of the human breast, in a man's own conscience. It is in this, that we find the origin of the multitude of moral motives, that are continually stirring up men to worthy and exalted enterprises. This is the law which governs them; and as it is inseparable from that nature, of which the Supreme Being is the author, it is the law of God.

§. 407. *Considerations in favour of the existence and authority of conscience.*

We shall now endeavour to state some of the considerations, which sustain the doctrine of the existence and authority of conscience, without professing, however, to enter into minuteness of detail, or to place them in all the points of view of which they are susceptible.

I.—We may assert with confidence, in the first place, that we have proof of the existence and of the authoritative nature of conscience in ourselves. We know from our own consciousness, that when we do certain actions, we are approved within. There is a voice in the soul, which whispers its approbation. On the other hand, when we do certain other actions of an opposite character, we are as distinctly reproved by this internal monitor. It would be deemed a strange and singular thing to find a man, who should openly and freely confess, that he has no conscience. Such a confession would disgrace him in his own eyes, not less than in those of the whole community, who would consider such a person unworthy of the name of man, and a dishonour to human nature.

Let the most depraved man, when some favourable opportunity has presented itself, unlawfully take the property of another, and let him even be assured in himself of

the impossibility of a discovery, and he will inevitably feel degraded, guilty, and unhappy. This is the law of our nature; the destiny which our consciousness assures us God has stamped upon our souls.

It is no small encouragement to find, that this source of argument on the present subject is appealed to by a writer, who deservedly enjoys the reputation not only of great learning and remarkable acuteness of mind, but also of great fairness and candour.——"There is a principle of reflection in men, (says Bishop Butler in his Sermons on Human nature,) by which they distinguish between, approve and disapprove their own actions. We are plainly constituted such sort of creatures as to reflect upon our own nature. The mind can take a view of what passes within itself, its propensions, aversions, passions, affections, as respecting such objects, and in such degrees; and of the several actions consequent thereupon. In this survey it approves of one and disapproves of another, and towards a third is affected in neither of these ways, but is quite indifferent. This principle in man, by which he approves or disapproves his heart, temper, and actions, is conscience; for this is the strict sense of the word, though sometimes it is used so as to take in more. And that this faculty tends to restrain men from doing mischief to each other, and leads them to do good, is too manifest to need being insisted upon."

II.—In the second place, the existence of a conscience is taken for granted in our general intercourse with our fellow men. We make our agreements and bargains with them, as if they had a conscience; we converse with them, and rejoice with them, and weep with them, as if they had a conscience; and in our more formal addresses and exhortations, we always take the same thing for granted. How many customers would a tradesman have, how long would any person be admitted into good company, how many public and responsible duties would any citizen whatever be called to fulfil, if it were known, or even suspected, that they had no conscience!

We shall feel more fully the force of the facts we have

now in view; if we consider the mode of address, which is usually employed, when a person wishes to persuade men to pursue a certain course. He appeals at first to their interest; he tells them of the various advantages which would attend the course he proposes; but he reserves, as his last and most efficacious argument, an appeal to their sense of duty. If every other consideration is found to fail, the orator assures them of his perfect persuasion, that they will not so disgrace themselves in the eyes of the whole world as to refuse obedience to the calls of conscience. He calls upon conscience to speak out on this important occasion, and he knows full well, if that voice of God and nature implanted in the human bosom, can be made to utter itself, there will no longer be occasion for his own humble efforts.

§. 408. *Further views on the existence and authority of conscience.*

III,—If it were otherwise, if there were no conscience and no original moral sentiments in men, the fact would be unaccountable, that terms are to be found in all languages expressive of moral distinctions and sentiments, and of a moral power. The ancients were accustomed to speak of the SENSUS RECTI ET HONESTI, and to distinguish the HONESTUM, in particular, as a principle of action, from the UTILE; and corresponding terms, and like distinctions are to be found in all modern tongues. And this is what would naturally be expected, on the supposition, that the foundation of such terms and distinctions is actually laid in the human constitution, and not otherwise. The probability, therefore, is, that the conscience, which is incorporated into all languages, has its origin in the conscience actually and originally incorporated into the human soul.

IV,—It may be remarked further, that the operation of the passions of anger and gratitude often implies the existence of a moral sense. If we suffer an injury, we are angry; if we receive a benefit we are grateful; but if soon after we discover, on the one hand that the injury was wholly accidental, and on the other, that our benefactor was governed by selfish motives, not seeking our good

but his own, both our anger and our gratitude cease. But it does not appear, how this could be, if we had not the power of making moral distinctions. The actual benefit and injury remain the same as they were at first; but the moral sense requires us to place a new and far different estimation on the authors of them.

V,—Again, all ages and all nations have come forth with their warmest commendation of certain actions, recorded in history; and solely on account of the high moral traits in the principal actors. If it could be ascertained in any way, that Leonidas and his companions bled at the pass of Thermopylæ, from a selfish desire of fame, and not from a sense of duty, the glory of that great action would be blasted at once.

Take a case from Roman history still more directly to our present purpose. The Roman Regulus was a prisoner at Carthage. The Carthaginians sent him to Rome, in order to procure a peace. He no sooner arrived at his native city, than, contrary to the hopes and expectations of the Carthaginians, he advised and urged the Romans to continue the war. Some persons, when he had seen fit to take this course, proposed to him not to return, as the most distressing results would be likely to follow. Regulus replied; "Though I am well acquainted with the tortures, which await me at Carthage, I prefer them to an act, which would cover me with infamy in my tomb. It is my duty to return, and for all else let the gods provide." He accordingly went back, and was put to death with unheard of sufferings.

This high-minded act of the noble Roman has been applauded by the whole human race, although nothing could be more unwise under the existing circumstances, if there were no such thing as conscience and conscientious obligations.

VI,–We may go further and add, that all moral writers, from the days of Plato and Cicero to the present time, and that all merely literary writers, especially the great tragedians, have proceeded in the execution of their admirable works, with a few exceptions, on the supposition, that

there are grounds of moral obligation in the human breast. It is with a reference to this principle, that they have proposed their plans of conduct, that they have uttered their most ennobling sentiments, that they have made their most affecting appeals, and secured most effectually the admiration of men. If there be no such thing as a conscience, then it may be said emphatically of the great Roman orator, that he darkened counsel by words without knowledge; in that case some of the most exalted sentiments of Shakspeare, are utterly unsound and inappropriate; and the fine moral passages of Milton and Spenser, of Cowper and Akenside can claim no higher praise than that of sounding rhapsodies, signifying nothing.

We will not insist here on the circumstance, that moral sentiments clearly discover themselves at a very early period of life; a fact of which the author of the Minstrel has made such admirable use. Certain it is, that whenever stories of marked injustice, cruelty, and ingratitude, are told to children, in such a way as to be clearly understood, they at once exhibit, not only by their words, but by looks and gestures, the most decided feelings of approbation or disapprobation.——The single remark remains to be made, that we find ourselves sustained in the views, which have been proposed, by the Holy Scriptures. The Apostle Paul, whose testimony, independently of his inspiration, is exceedingly valuable, plainly teaches them.——*When the Gentiles, which have not the law, do by nature the things contained in the law, these, having not the law, are a law unto themselves; which shew the work of the law written in their hearts, their conscience also bearing witness, and their thoughts the meanwhile accusing, or else excusing one another.*

§. 409. *Conscience sometimes perverted by passion.*

We arrive, therefore, at the conclusion, that man has a moral susceptibility. At the same time we cannot deny, that its action is sometimes blunted and perverted. It accordingly seems to be necessary that we should briefly state

under what circumstances, or from what causes, this perversion takes place.—And in the first place, the due exercise of conscience or the moral susceptibility may be perverted, when a person is under the influence of violent passions.

The moral emotion, which under other circumstances would have arisen, has failed to arise in the present instance, because the soul is intensely and wholly taken up with another species of feeling. But after the present passion has subsided, the power of moral judgment returns; the person, who has been the subject of such violence of feeling, looks with horror on the deeds, which he has committed. So that the original susceptibility, which has been contended for, cannot justly be said to cease to exist in this instance; although its due exercise is prevented by the accidental circumstance of inordinate passion.

Further; those, who imagine, that there are no permanent moral distinctions, because they are not regarded in moments of extreme passion, would do well to consider, that at such times persons are unable rightly to apprehend any truths whatever. A murderer, when drawing the blade from the bosom of his victim, probably could not tell the quotient of sixteen divided by four, or any other simple results in numbers; but certainly his inability to perceive them under such circumstances does not annul numerical powers and distinctions, nor prove the absolute want of a power to perceive them. Why then should the same inability take away moral distinctions, or prove the absolute absence of a moral susceptibility?

§. 410. *Complexity in actions a source of confusion in our moral judgments.*

A second reason, why men, although they are under the guidance of an original susceptibility, do not always form the same judgments of actions, is to be found in their complexity.——Actions, in a moral view, are

nothing of themselves, independently of the agent. In forming moral judgments, therefore, we are to look at the agent; and we are to regard him not only as willing and bringing to pass certain effects, but we are to consider him also as the subject of certain desires and intentions; and we are unable rightly to estimate these, without taking into view various attendant circumtances. In some cases the intention is obvious; and in these the judgment is readily formed. But in other cases the results are complex; they are a mixture of good and evil; and hence arises a difficulty in ascertaining the true intention and design of the agent.

When different individuals, therefore, are called upon to judge of an instance of this kind, they will be not unlikely to give their attention to different circumstances, or they may have different views of the same circumstances, considered as indications of feeling and intention. This being the case, the judgments, which they will pass, will in effect be pronounced upon different things, inasmuch as they will have such difference of views. Hence in a multitude of actions, there will be sufficient reason for a diversity of moral sentiments, where by superficial observers a perfect uniformity may have been expected.

These remarks throw some light upon the supposed approbation of theft among the Spartans. This people were trained up by their political institutions to regard property as of little value; their lands were equally divided; they ate at public tables; and the great end of all their civil regulations was to render the citizens athletic, active, patient, and brave. Every thing else was considered subordinate. The permission, which was given to the Spartan lads to steal, was a part of the public regulations. It was a sort of tax, which the citizens voluntarily imposed upon themselves, in order to encourage vigilance, endurance, and address in the younger part of the community; and hence, when they were detected immediately after the theft, they were severely punished for deficiency of skill. Accordingly the theft, which was permitted and

approved by the Spartans, was a very different thing from what goes under that name with us. The mere act may have been the same, but there was no correspondence in the results and attendant circumstances, and in the degree of evil intention.——Similar inquiries in other instances will go far in explaining many apparent deviations from the permanent distinctions between vice and virtue, and will reduce the number of cases of supposed want of uniformity in moral sentiments.

§. 411. *Influence of early associations on moral judgments.*

Our moral judgments, in the third place, are sometimes perplexed and perverted by means of early associations.——The principle of association does not operate upon the moral capacity directly; it operates indirectly, with considerable influence. When a particular action is to be judged of, it calls up in the mind of different individuals, different and distinct series of accessory circumstances. This difference in the tendencies of the associating principle can hardly fail to have considerable effect in modifying the sentiment of approbation or disapprobation resulting from the consideration of any particular action.

Accordingly when vices are committed by near friends, by a brother, or a parent, they do not excite in us such abhorrence, as in other cases. Our prepossessions in favour of the persons, who have committed the crime, suggest a thousand circumstances, which seem to us to alleviate its aggravation. We frame for them a multitude of plausible excuses, which we should not have thought of doing, had it not been for the endearments and intercourse of our previous connection.——Savage life also gives us an illustration of the views now expressed. Owing to the peculiar situation of those in that state and the consequent early associations, a factitious and exaggerated importance is attached to mere courage; and gentleness, equanimity, and benevolence, are, as virtues, proportionably depressed.

§. 412. *Of the relation of the reasoning power to conscience.*

The opinion has sometimes been advanced, that our moral judgments are the results of reasoning. It is not surprising on the whole that this mistake, which is a very serious and prejudicial one, should have been committed, when we consider, how close the relation is, which reason sustains to conscience. This subject is worthy of our attention.

In the first place, reasoning is purely an intellectual process; consisting of successive propositions arranged together, and a succession of relative suggestions or perceptions, but involving nothing which is properly called an emotion. Our moral sentiments are emotions; and probably every one can say with confidence that he is conscious of a difference in the moral feelings of approval and disapproval, and the mere intellectual perceptions of agreement, and disagreement, which are characteristic of reasoning. Our consciousness assures us, that they are truly diverse in their nature; and cannot be interchanged with each other. The moral feeling is one thing; and the intellectual perception or suggestion involved in reasoning is another.

And yet it must be admitted, that reasoning has very much to do with the decisions of conscience. For instance, when one man is alleged to have put another to death, we find the conscience ready to discharge the duty, which the author of our nature has assigned it; but not unfrequently its decisions are arrested and postponed, in order to give time for the inquiries and conclusions of the reasoning power. Such inquiries inform us perhaps, that the murder was premeditated and committed in cold blood; and in view of this fact, conscience immediately passes its decision. Perhaps our inquiries inform us, that the murder was committed under the reception of unreasonable injuries and the influence of excited passion; and conscience here as in the other case, condemns the criminal, but with a mitigated sentence. It may be, that we

learn from our inquiries, which of course always imply the exercise of the reasoning power, that the murder was committed at dead of night, in the necessary defence of the criminal's own life, his home, and his family; and the circumstances may be so peculiar, that conscience, instead of condemning, may approve the action.

Conscience, therefore, however distinct the two may be in themselves, is aided and supported by reason. The reasoning power, which is not unfrequently lauded as the glory of man, is the servitor and hand-maid of the conscience; and the decisions of the latter will vary in exact proportion with the new facts and the new views, which are presented by the former. In the constitution of things they are destined to go together; and while conscience is most justly characterized as the propitious and guiding light of the soul, it must undoubtedly be admitted, that it is the agency of reason, which feeds and sustains its lustre.

It is in consequence of this close connection and the important assistance rendered to conscience by reason, that they have sometimes been confounded together. But it is very essential to right views of the mind, that this erroneous notion should be corrected, and that the relation, existing between these two distinct parts of our mental nature, should be fully understood.

§. 413. *Of enlightening the conscience.*

It clearly follows from the views which have been taken, that the moral susceptibility will operate with the greater readiness and efficiency, in proportion as the knowledge of ourselves and of our relations to other beings is increased. And the knowledge to be acquired with this end may be stated in some particulars.——(1) As the Being, who gave us life, has given us conscience, and, consequently, could not intend, that conscience should act in opposition to himself, it seems to be an indispensable duty, that men should be acquainted with his character.

His character is made known to us in those works, of which He is the author, and in the Scriptures. If we have right views of the Supreme Being, and of the relation, which we sustain to Him, our conscience will infallibly approve what he has enjoined, and disapprove what he has forbidden.——(2) Inasmuch as it results from the relation, which we sustain to the Supreme Being, that correct decisions of conscience are not, and cannot be at variance with his laws, but will agree with them, whenever they are made known, it follows, that all should be made acquainted with the moral and religious precepts, which he has communicated to us. To every mind, that has proper views of the self-existence of God and our dependance upon Him, it will be enough to justify any action, that *He has said it*. The mere disclosure of his will cannot but render, in all cases, an action approved in the sight of conscience, whatever may be our ignorance of the consequences connected with it. Hence, in order to prevent erroneous decisions of conscience, it is exceedingly important, we should know not only what God is in himself, but every thing, which he has expressly commanded.

(3) As all duties, which truly result from the relations we sustain to our fellow beings, are expressions of the will of God, who is the Creator of all around us as well as of ourselves, we should earnestly inquire what those relations and duties are. We are to inquire what duties devolve upon us in respect to our immediate circle, to the poor and the sick, to our neighbourhood, and to society in general. Our feelings in respect to the performance of such studies cannot be so clear and vivid, if we exclude the Supreme Being from our consideration of them, as they would otherwise be. A knowledge of the will of God, from whatever other source it is obtained, will tend to guide and strengthen the inward moral feeling.

(4) Since the decisions of conscience are often exceedingly perverted by the undue influence of passion, men should both guard against the recurrence of passion-

ate feelings in general; and when at any time they have reason to suspect themselves of being under the influence of such passion, the decision on the merits or demerits of any particular action ought to be put off to a more favourable period. Nor are we less to guard against prejudices, —the prejudices in favour of friends, and against those, whom we may imagine to have injured us; the prejudices of sects, political parties, &c; for they often give the mind a wrong view of the action, upon which it is to judge. Also when actions are complex, either in themselves or their results, the greater care is requisite in properly estimating them.

PART THIRD.

SENTIENT STATES OF THE MIND.

CLASS SECOND,

DESIRES.

CHAPTER FIRST.

INSTINCTS.

§. 412. *Of the instincts of man compared with those of the inferiour animals.*

In proceeding to examine that part of our sentient constitution, which is comprehended under the general name of Desires, we naturally begin with *instincts.*——It is generally conceded, that there are in our nature some strong and invariable tendencies to do certain things, without previous forethought and deliberation, which bear that name. The actions of men are not always governed by feelings founded on reasoning, but are sometimes prompted by quick and decisive impulses, which set themselves in array, before reason has time to operate. It is from this circumstance that these mental tendencies or desires are termed instinctive ; a word, which implies in its original meaning a movement or action, whether mental or bodily, without reflection and foresight.

Although such instinctive tendencies are undoubtedly found in men, it must be admitted, that they are less frequent, and in general less effective, than in the lower animals. And in truth, it could not be expected to be otherwise, when we remember, that the brute creaton are wholly destitute of the powers of reasoning and of abstraction, or at most possess them only in a small degree. The provident oversight of the Supreme Being, without whose notice not a sparrow falleth to the ground, has met

this deficiency by endowing them with instincts, the most various in kind, and strikingly adapted to the exigencies of their situation. We find the proofs of this remark in the nests of birds, in the ball of the silk worm, in the house of the beaver, in the return and flight of birds at their appointed seasons, and in a multitude of other instances.

§. 413. *Of the nature of the instincts of brute animals.*

So abundantly has the great Father of all things provided by means of their instincts, for the preservation and enjoyment of the inferiour animals, that they even, in some respects, seem to have the advantage over man. with all his high and excellent capacities. In the early periods of the human race, men looked abroad upon the great ocean with timidity; theylaunched their frail vessels, and directed their course by the sun and stars; but with all their care and wisdom they were often baffled, and obliged to put back again into the place of their departure, or ran perhaps upon some unknown shore. But flocks of migratory birds are frequently seen navigating the boundless fields of air, passing wide tracts of unknown land and water, and returning again at the set time and with scarcely making a mistake, or wandering a league from their course; and yet they are without any histories of former voyages, without chart and compass; nor do they read the way of their flight in the bright letters of Orion and Pleiades.

This is only one of the facts or classes of facts, which illustrate this subject; but it shows very clearly the unerring guidance, the fixed and definite adaption to a particular end, which is the characteristic of instincts.

> "Who bade the stork Columbus-like explore
> "Heavens not his own, and worlds unknown before?
> "Who calls the council, states the certain day,
> "Who forms the phalanx, and who points the way?

The ways, in which this unerring tendency, this divine guidance shows itself, are almost innumerable. The philosopher Galen once took a kid from its dead mother

by dissection, and before it had tasted any food, brought it into a certain room, having many vessels full, some of wine, some of oil, some of honey, some of milk, or some other liquor, and many others, filled with the different sorts of grain and fruit; and there laid it. After a little time the embryon had acquired strength enough to get up on its feet; and it was with sentiments of strong admiration that the spectators saw it advance towards the liquors, fruit, and grain, which were placed round the room, and having smelt all of them, at last sup the milk alone. About two months afterwards, the tender sprouts of plants and shrubs were brought to it, and after smelling all of them and tasting some, it began to eat of such as are the usual food of goats.

The cells, constructed by the united efforts of a hive of bees, have often been referred to, as illustrating the nature of instincts.——"It is a curious mathematical problem, says Dr. Reid, at what precise angle the three planes, which compose the bottom of a cell in a honey-comb, ought to meet in order to make the greatest saving, or the least expense of material and labour. This is one of those problems belonging to the higher parts of mathematics, which are called problems of *maxima* and *minima*.' It has been resolved by some mathematicians, particularly by the ingenious Mr. Maclaurin, by a fluxionary calculation, which is to be found in the Transactions of the Royal Society of London. He has determined precisely the angle required; and he found by the most exact mensuration the subject could admit, that it is the very angle, in which the three planes in the bottom of the cell of a honey-comb do actually meet.

Shall we ask here, who taught the bee the properties of solids, and to resolve problems of maxima and minima? We need not say that bees know none of these things. They work most geometrically, without any knowledge of geometry; somewhat like a child, who, by turning the handle of an organ, makes good music without any knowledge of music. The art is not in the child, but in him who made the organ. In like manner, when a bee

makes its comb so geometrically, the geometry is not in the bee, but in the great geometrician who made the bee and made all things in number, weight, and measure."

§. 414. *Instincts susceptible of slight modifications.*

We usually speak of the instincts of animals as fixed and inflexible; and they undoubtedly are so, in a considerable degree. Of this inflexibility, or fixed and particular direction, which is appropriate to them, a multitude of facts might be brought as proof. Mr. Stewart, speaking of a blind old beaver, that had been taken and kept for a number of years in a pond by itself, asserts, that the animal showed no inconsiderable degree of sagacity and mechanical contrivance in accomplishing particular ends; but these ends were in no respects subservient to its accommodation or comfort in its actual situation, although manifestly parts of those systematic instincts, which belong to it in its social state. The animal seemed, he further observes, like a solitary wheel of a machine, which exhibits in its teeth marks of a reference to other wheels, with which it was intended to co-operate.

It must be admitted, however, whatever may be the correctness of this general view, that instincts are not always found in a pure and unmixed state, but are susceptible of being modified from observation and experience. The consequence is, that the naturally invariable tendency of the instinct is frequently checked and controlled; and it acquires, in that way, an appearance of flexibility, which does not belong to it in its pure state. Hence there is often seen in old animals a cunning and sagacity, which is not discoverable in those that are young; a difference, which could not exist, if both old and young were governed, in all cases, by an unmixed instinct.

§. 415. *Instances of instincts in the human mind.*

But it is not our design to enter particularly into the subject of the instincts of animals in this place, although this topic is undoubtedly one of exceeding interest both to the philosopher and the Christian. Such inquiries are too

diverse and remote from our main object, which has particular, if not exclusive reference to the economy of human nature. There are certain instinctive tendencies in man, as well as the inferiour animals; but they are few in number; and compared with the other parts of his nature, are of subordinate importance. Some of them will now be referred to.

I,—The action of respiration is thought to imply the existence of an instinct. We cannot suppose that the infant at its birth has learnt the importance of this act by reasoning upon it; and he is as ignorant of the internal machinery, which is put in operation, as he is of its important uses. And yet he puts the whole machinery into action at the very moment of coming into existence, and with such regularity and success, that we cannot well account for it, except on the ground of an instinctive impulse.

II—"By the same kind, of principle, (says Dr. Reid, Essays on the Active Powers, III, chap. 2,) a new born child when the stomach is emptied, and nature has brought milk into the mother's breast, sucks and swallows its food as perfectly as if it knew the principles of that operation, and had got the habit of working according to them.

"Sucking and swallowing are very complex operations. Anatomists describe about thirty pair of muscles, that must be employed in every draught. Of those muscles, every one must be served by its proper nerve, and can make no exertion but by some influence communicated by the nerve. The exertion of all those muscles and nerves is not simultaneous. They must succeed each other in a certain order, and their order is no less necessary than the exertion itself.—This regular train of operations is carried on, according to the nicest rules of art, by the infant, who has neither art, nor science, nor experience, nor habit.

"That the infant feels the uneasy sensation of hunger I admit; and that it sucks no longer than till this sensation be removed. But who informed it, that this uneasy sensation might be removed, or by what means? That it

knows nothing of this is evident, for it will as readily suck a finger, or a bit of stick, as the nipple."

III,—The efforts, which men make for self-preservation, appear to be in part of an instinctive kind. If a man is in danger of falling from unexpectedly losing his balance, we say with much propriety, that the instantaneous effort he makes to recover his position is instinctive. If a person is unexpectedly and suddenly plunged into a river, the first convulsive struggle, which he makes for his safety, seems to be of the same kind. His reasoning powers may soon come to his aid, and direct his further measures for his preservation; but his first efforts are evidently made on another principle. When a violent blow is aimed at one, he instinctively shrinks back, although he knew beforehand, it would be aimed in sport, and although his reason told him, there was no danger. We always instinctively close the eyelids, when any thing suddenly approaches them. Dr. Reid asserts that he has seen this tried upon a wager, which a man was to gain if he could keep his eyes open, while another aimed a stroke at them in jest. When we are placed on the summit of a high tower, or on the edge of a precipice, although we are perfectly assured of our safety by the reasoning power, the instinct of self preservation is constantly suggesting other precautions.

§. 416. *Further instances of instincts in men.*

IV,—There is also a species of resentment, which may properly be called instinctive. Deliberate resentment implies the exercise of reason, and is excited only by intentional injury. Instinctive resentment, on the other hand, operates, whether the injury be intentional or not; and precisely as it does in the lower animals.

Whenever we experience pain which is caused by some external object, this feeling arises in the mind with a greater or less degree of power, and prompts us to retaliate on the cause of it.——A child, for instance, stumbles over a stone or stick of wood, and hurts himself, and under the impulse of instinctive resentment violently beats

the unconscious cause of its suffering. Savages, when they have been struck by an arrow in battle, have been known to tear it from the wound, break, and bite it with their teeth, and dash it on the ground, as if the original design and impetus of destruction were in the arrow itself. All persons of strong passions in particular show the existence and workings of this instinct, when they wreak their vengeance, as they often do, on inanimate objects, by beating or dashing them to pieces.

V,—There is undoubtedly danger of carrying the doctrine of the instinctive tendencies of the human mind too far, but we may consider ourselves safe in adding to those, which have been mentioned, the power of interpreting natural signs. Whenever we see the outward signs of rage, pity, grief, joy, or hatred, we are able immediately to interpret them. It is abundantly evident, that children, at a very early period, read and decypher, in the looks and gestures of their parents, the emotions and passions, whether of a good or evil kind, with which they are agitated.

It must be admitted, that the power of interpreting natural signs depends in part on experience and on deductions drawn from that experience; but the power is evidently in some degree instinctive. Often when we see, both in children and in older persons, the strong outward manifestations of grief, when we are at the same time assured, that there is but little of suffering in fact, we find ourselves very sensibly affected. So when we see an actor on the stage, with distorted countenance and accents of deep grief, the outward signs carry a momentary conviction and a momentary pang to our own hearts, in spite of the admonitions of reason; a circumstance which cannot well be accounted for, except on the ground, that these signs speak to us with a natural power; that is to say, are instinctively interpreted.

CHAPTER SECOND.

APPETITES.

§. 417. *Of the general nature and characteristics of the appetites.*

UNDER the general head of Desires, the subject of APPETITES seems next to propose itself for consideration. But as it is one of limited extent, and of subordinate importance in a metaphysical point of view, only a few remarks will be necessary. The arrangement, which brings the subject forward for discussion in this place, will recommend itself on a very little attention. The prominent appetites are those of HUNGER and THIRST; but the appetite of hunger is nothing more than the desire for food; the appetite of thirst is a desire for drink.

Nevertheless they appear to be sufficiently distinguished from the other desires. They are not, like the instincts, always gratified in a certain fixed and particular manner; nor are they like them, in being wholly independent of the reasoning power. On the contrary, they may be restrained and regulated in some degree; and when it is otherwise, their demands may be quieted in various ways.

But without dwelling upon such considerations, the statement has been made with much appearance of reason, that they are characterized by these three things;—1. They take their rise from the body, and are common to

men with the brutes.—(2)They are not constant in their operation, but occasional.—(3)They are accompanied with an uneasy sensation.

It may be remarked here, that the feeling of uneasiness now referred to appears always to precede the desire or appetite, and to be essential to it.

§. 418. *The appetites necessary to our preservation, and not originally of a selfish character.*

Although our appetites do not present much of interest, considered as parts of our mental economy, they have their important uses, in connection with the laws and requirements of our physical nature.——"The appetites of hunger and thirst, says Stewart, were intended for the preservation of the individual; and without them reason would have been insufficient for this important purpose. Suppose, for example, that the appetite of hunger had been no part of our constitution, reason and experience might have satisfied us of the necessity of food to our preservation, but how should we have been able, without an implanted principle, to ascertain, according to the varying state of our animal economy, the proper seasons for eating, or the quantity of food that is salutary to the body? The lower animals not only receive this information from nature, but are, moreover, directed by instinct to the particular sort of food that it is proper for them to use in health and in sickness. The senses of taste and smell, in the savage state of our species, are subservient, at least in some degree, to the same purpose.

"Our appetites can, with no propriety, be called *selfish*, for they are directed to their respective objects as ultimate ends, and they must all have operated, *in the first instance*, prior to any experience of the pleasure arising from their gratification. *After* this experience indeed, the desire of enjoyment will naturally come to be combined with the appetite; and it may sometimes lead us to stimulate or provoke the appetite with a view to the pleasure, which is to result from indulging it. Imagination, too, and the association of ideas, together with the social af-

fection, and sometimes the moral faculty, lend their aid, and all conspire together in forming a complex passion, in which the animal appetite is only one ingredient. In proportion as this passion is gratified, its influence over the conduct becomes the more irresistible, (for all the active determinations of our nature are strengthened by habit,) till at last we struggle in vain against its tyranny. A man so enslaved by his animal appetites exhibits humanity in one of its most miserable and contemptible forms."

§. 419. *Of the prevalence and origin of appetites for intoxicating drugs.*

There are not only natural appetites, but artificial or acquired ones. It is no uncommon thing to find persons, who have formed an appetite for ardent spirits, for tobacco, for opium, and intoxicating drugs of various kinds. It is a matter of common remark, that the appetite for inebriating liquors in particular is very prevalent, especially among Savage tribes.—And it may be proper briefly to explain the origin of such appetites.

Such drugs and liquors, as have been referred to, have the power of stimulating the nervous system; and by means of this excitement they cause a degree of pleasure. This pleasurable excitement is soon followed by a corresponding degree of languor and depression, to obtain relief from which resort is again had to the intoxicating draught or drug. This results not only in a restoration, but an exhilaration of spirits; which is again followed by depression and distress. And thus resort is had time after time to the strong drink, the tobacco, the opium, or whatever it is which intoxicates, until an appetite is formed so strong as to subdue, lead captive, and brutalize the subject of it. So that the only way to avoid the forming of such a habit, after the first erroneous step has been taken, is quietly to endure the subsequent unhappiness attendant on the pleasurable excitement of intoxication, till

*Stewart's Philosophy of the Moral and Active Powers, Bk. I, Chap. I.

the system has time to recover itself, and to throw off its wrechedness by its own efforts.

§. 420. *Of occasional desires for action and repose.*

Our occasional desires for action and repose are, in some respects allied to our appetites. Although it has so happened, that these desires have not been marked by a separate and specific name, they may justly claim, as parts of our mental nature, some attention. Mr. Stewart remarks, that they have the three characteristics of the appetites, and proceeds to speak of them as follows.

"They are common, too, to man and to the lower animals, and they operate, in our own species in the most infant state of the individual. In general, every animal we know is prompted by an instinctive impulse to take that degree of exercise which is salutary to the body, and is prevented from passing the bounds of moderation by that languor and desire of repose, which are the consequences of continued exertion.

"There is something also very similar to this with respect to the mind. We are impelled by nature to the exercise of its different faculties, and we are warned, when we are in danger of overstraining them, by a consciousness of fatigue. After we are exhausted by a long course of application to business, how delightful are the first moments of indolence and repose! *O che bella cosa di far niente!* We are apt to imagine that no inducement shall again lead us to engage in the bustle of the world; but, after a short respite from our labours, our intellectual vigor returns; the mind rouses from its lethargy like a giant from his sleep, and we feel ourselves urged by an irresistible impulse to return to our duties as members of society."

CHAPTER THIRD.

PROPENSITIES.

§. 421. *General remarks on the nature of propensities.*

As we pursue these inquiries, we meet with certain Desires, which are different from any we have hitherto attended to; and which accordingly require a distinct consideration. As they are neither instincts, nor appetites, nor affections, as the latter term is commonly employed, we shall find a convenience in designating them as Propensities. Among these are curiosity or the desire of knowledge, sociability or the desire of society, emulation or the desire of superiority, the desire of esteem, the propensity to imitate, &c.

Although they have not the fixed and definite character of instincts, nor that close connection with bodily uneasiness, which is characteristic of the appetites, it is difficult to state definitely what those marks are, by which these propensities are distinguished and known. It is true, that they are to be regarded as simple desires, having a particular, though not very definite direction; but it must be admitted, that this does not give a very specific notion of them. It seems, therefore, to be necessary to ascertain their nature from general statements, and from the various facts, which, in making such statements, will be alluded to.

§. 422. *Of curiosity or the desire of knowledge.*

There is ample reason for believing, that the principle of curiosity or the desire of knowledge is one of the elements and original characteristics of our mental constitution. Although it must be acknowledged, that this principle exists in very various degrees, from the weakest form of life and activity to almost irrepressible strength, yet a person utterly without curiosity would be deemed almost as strange and anomalous, as a person without sensation. If curiosity be not natural to man, then it follows that the human mind is naturally indifferent to the objects, that are presented to it, and to the discovery of truth; and that its progress in knowledge is unattended with satisfaction; a state of things, which certainly could not be expected, and is not warranted by facts. In what school of philosophy was it ever taught, that the human mind, with this unbounded mental and material universe around it, adorned throughout and brilliant with truth, has no natural desire to possess and enjoy this beauty and radiance of knowledge, but is equally well contented with the glooms of ignorance!

We see the operation of this principle every where. When any thing unexpected and strange takes place, the attention of all persons is immediately directed towards it; it is not a matter of indifference, but all are anxious to ascertain the cause. Without the aids of this strong desire, how few persons would be found, who would be willing to explore the intricacies of science, or search the labyrinths of history! And what an accession would there be to the multitude of volumes, that remain unopened and untouched upon the shelves, where they are deposited!

There is at least one class of writers, whose prospects of being read depend, in a great measure, on the workings of this principle; we refer to novelists and writers of romance. However commonplace may be their conceptions, and however uninteresting their style, if they lay the plan of their novel or romance with so much skill as

strongly to excite the curiosity, they can command readers. And this undoubtedly is the whole secret of success in a multitude of cases.

In further proof of the existence of this propensity, it may be proper to refer to the whole class of the Deaf and Dumb, and to those unfortunate individuals, who are blind, as well as deaf and dumb. These persons almost uniformly give the most striking indications of a desire to learn; it seems to glow in their countenance, to inspire their gestures, and to urge them on, with a sort of violence, in their inquiries. Certainly if the principle of curiosity did not exist in great strength, they would be entirely overcome by the multitude of discouragements, with which they are encompassed.

But it is unnecessary to dwell upon these general considerations, or to refer to extraordinary instances, when we constantly witness in all infants and children the most ample proofs of the existence of this principle. It seems to be their life; it keeps them constantly in motion; from morn till night it furnishes new excitements to activity, and new sources of enjoyment.

"In the pleased infant see its power expand,
"When first the coral fills his little hand;
"Throned in his mother's lap, it dries each tear,
"As her sweet legend falls upon his ear;
"Next it assails him in his top's strange hum,
"Breathes in his whistle, echoes in his drum;
"Each gilded toy, that doting love bestows,
"He longs to break and every spring expose.

§. 423. *Propensity to imitation or the desire of doing as others do.*

Another of the original propensities of the human mind is the principal of imitation, or the desire of doing as we see others do. We find the evidence of the existence of such a principle every where around us.

I,—If this propensity be not natural, it will be difficult to account for what every one must have noticed in infancy and childhood. And we take this occasion to remark.

that, on this whole subject, we shall refer particularly to the early periods of life. That is a time, when human nature will be likely to show itself in its true features. And in respect to the principle now before us, it is certain, that children are early found to observe with care what others do, and to attempt doing the like. They are greatly aided by this propensity in learning to utter articulate sounds. It is not without long continued efforts, in which they are evidently sustained by the mere pleasure of imitation, that they acquire the use of oral language.

At a little later period of life, after having learnt to articulate and having become old enough to take a part in juvenile sports, we find the same propensity at work. With the animation and formidable airs of jockeys, they bestride a stick for a horse, and try equestrian experiments; they conduct their small and frail carriages through courts and streets, and journey with their rude sledges from one hill-top to another. Ever busily engaged, they frame houses, build fortifications, erect water-works, and lay out gardens in miniature. They shoulder a cane for a musket; practice a measured step and fierce look; and become soldiers, as well as gardeners and architects, before they are men.

II,—But the operation of this propensity is not limited to children; men also do as their fathers have done before them; it often requires no small degree of moral courage to deviate from the line of precedents. Whether right or wrong, we feel a degree of safety, so long as we tread in the path of others.

This is shown in the most solemn transactions, particularly in judicial decisions. Seldom does the judge appeal to original principles of right, and build his decision on the immutable will of the Supreme Being, as it is revealed in the moral sentiments of all mankind, if he must do it in the violation of a precedent. Indeed the whole administration of justice according to the forms of the Common Law is a most remarkable proof of the existence of this propensity. Those judicial proceedures were originally found-

ed upon the principle before us; and although they have ever been supported by various considerations of their safety and wisdom, they still derive their stability from it, in a great measure. If we could expel from the human bosom the principle of imitation, there would be far less efficacy attached to many of the opinions and decrees and doings of our ancestors, than there is at present. But undoubtedly for sufficient reasons, it is wisely ordered that such an expulsion is imposible.

§. 423. *Of sociability or the natural desire of society.*

The next propensity, which we shall examine, is the desire of union in civil societies, and of social intercourse in general. If any principle whatever in relation to the human mind is susceptible of being ascertained and established by an appeal to facts, it is, that the desire of society is natural to man. The following considerations will help to show the justness of this remark.

I,—The existence of such a propensity is proved, in the first place, like those of curiosity and imitation, by what we notice in the early periods of life. No one is ignorant, that infants and very young children exhibit a strong attachment to their parents and others who tend upon them, and a desire for their company and uneasiness at their absence. When left alone, even for a very short time, they discover a great degree of unhappiness, which may sometimes be ascribed to fear, but more often to the mere sense of loneliness, and the desire for society.

When other infants and children are brought into their company, whom they have never seen before, this propensity is at once shown in their smiles, their animated gestures, and sparkling eyes. And when they are old enough to go out and play in the streets, we find them almost always in groups. Their sports, their wanderings in fields and forests, their excursions in fishing and hunting, are all made in companies; and the privilege of amusing themselves in these ways, on the condition of not being allowed the attendance of others, would be deemed scarcely better than a punishment.

II,—This propensity is very strongly shown also in men grown up. It is true, that, finding greater resources in themselves, they support retirement and solitude better than children; but it is very evident, that man's proper element, (and that in which he alone can be happy,) is society, in some shape and in some degree. Hence the frequency of family meetings, of convivial parties, of religious, literary, and political assemblies, which constantly occur in all communities throughout the world, and which seem to be almost as necessary to men as the air they breathe, or their daily food.

Some may perhaps be disposed to speak of these things as resulting from, or at least connected with the comforts and conveniences of civilized life. But this explanation is by no means sufficient. It does not appear, that the social principle exhibits itself any where more strongly than among groups of wandering gypsies, in the tents of stern and restless Arabs, in the wigwams and hunting parties of American Savages, or the cheerless abodes of the poor and desolate Esquimaux.

III,—We may also find a proof of the existence of this strong desire in all cases of confinement in prisons and of exile. If the social propensity were not natural to us, it is unaccountable, that exclusion, in any of these ways, from the intercourse of former friendships, should be attended with such unspeakable wretchedness. Even the stern and inflexible Coriolanus, for whom all the forms of danger and even of death seem to have had no terrors, could not endure his protracted banishment from Rome without bitter complaint, *Multo miserius seni exilium esse.*

IV,—Facts can be brought to show, that the desire of society is so inseparable from man's nature and so strong, that, if men are entirely excluded from the company of their fellow men, they will be glad to make themselves the companions of sheep, dogs, horses, goats, mice, spiders, any thing whatever, which has life and motion.

Our limits will not permit us to multiply instances in proof of what is now said. A single incident will suffice. Mr. Stewart, in illustrating this very subject, makes the

following statement.——"The count de Lauzun was confined by Louis XIV for nine years in the castle of Pignerol, in a small room where no light could enter but from a chink in the roof. In this solitude he attached himself to a spider, and contrived for some time to amuse himself with attempting to tame it, with catching flies for its support, and with superintending the progress of its web. The jailor discovered his amusement, and killed the spider; and the count used afterwards to declare, that the pang he felt on the occasion could be compared only to that of a mother for the loss of a child."——We hold it to be quite certain, that such considerations and facts as have been brought forward, and which might be multiplied to almost any extent, cannot be satisfactorily explained, except on the ground, that the love of society is originally implanted in man's bosom, and that he is exceedingly unhappy without it.

§. 427. *Of emulation or the desire of superiority.*

Among other mental tendencies, coming within the catalogue of propensities, we may reckon EMULATION or the desire of superiority. Without undertaking to define the feeling of emulation, which cannot effectually be done on account of its entire simplicity, it is perhaps necessary to distinguish it from envy. It is true, that the passion of envy involves the desire of superiority, and so far is the same as emulation; but it differs in this, that it is accompanied with a feeling of ill will towards all competitors, from which the feeling of pure emulation is free. It cannot be denied, however, that envy often follows in the train of emulation; and this is probably the reason of their being so often confounded together, and spoken of, as if they were one.

It is believed, that no one will require any length of argument to prove the existence of the principle of emulation. The whole world is its theatre; and there is not a country, nor canton, nor town, nor family, where its effects may not be seen; all are eagerly rushing forward, dissatisfied with their present situation; and they

seldom witness any attainment, either in themselves, or in others, beyond which they are not anxious to advance.

This principle has its important uses; no one can doubt, that it aids very essentially in keeping the powers of men in suitable activity. We sometimes see individuals of distinguished talents, who hold the same place in public estimation, contending with all the powers of their minds for the mastery over each other, and yet maintaining a mutual respect and sincere friendship. But it cannot be denied, that the spirit of kind and generous rivalry is too apt to annul all the good effects that might be expected from it, by degenerating after a time into the most hateful form of hostility, or by acquiring such intensity as to overwhelm and expel every other principle of action.

§. 428. *Of the natural desire of esteem.*

Another distinct and important propensity is the *desire of esteem*.——In proof of the natural and original existence of this principle in the human mind, we are at liberty to appeal, as in the case of all the other propensities, to what we notice in the beginnings of life and the first developements of the mental nature. Before children are capable of knowing the advantages; which result from the good opinion of others, they are evidently mortified at expressions of neglect or contempt, and as evidently pleased with expressions of regard and approbation. As it is impossible satisfactorily to account for this state of things, on the ground of its being the result of reasoning, experience, or interest, the only explanation left, is, that this desire is a part of the connatural and essential furniture of the mind.

II,—We may remark further, that the desire of esteem is found to exist very extensively and strongly, in the more advanced periods of life. If we look at the history of nations and of individuals, how many men do we find, who have been willing to sacrifice their life, rather than forfeit the favourable opinion of others! When they have lost all besides, their health, their for-

tune, and friends, they cling with fondness to their good name ; they point triumphantly to their unsullied reputation, as a consolation in their present adversities, and the pledge of better things in time to come.——This is especially true of those periods in the history of nations, when the original sentiments and traits of the people have not been corrupted by the introduction of the arts of luxury and refinement.

III,—It is an additional proof in favour of the natural origin of this propensity, that it operates strongly in reference to the future. We not only wish to secure the good opinion of others at the present time, and in reference to present objects, but are desirous, that it should be permanent, whether we shall be in a situation directly to experience any good effects from it, or not. Even after we are dead, although we shall be utterly separated both from the applauses and the reprobations of men, still we wish to be held in respectful and honourable remembrance. Fully convinced as we are, that no human voice shall ever penetrate and disturb the silence of our tombs, the thought would be exceedingly distressing to us, if we anticipated, that our memories would be calumniated. We may attempt to reason on the folly of such feelings, but we find it impossible to annul the principles planted within us, and to stifle the voice of nature speaking in the breast.

The operation of this principle, when kept within its due and appropriate limits, is favourable to human happiness. It begins to operate at a very early period of life, long before the moral principles have been fully brought out and established ; and it essentially promotes a decency and propriety of deportment, and stimulates to exertion.

Nevertheless, we are to guard with care against making the opinion of others the sole and ultimate rule of our conduct. Temporary impulses, and peculiar local circumstances may operate to produce a state of public sentiment, to which a good man cannot conscientiously conform. In all cases, where moral principles are involved, there is another part of our nature to be consult-

ed. In the dictates of an enlightened Conscience, we find a code, to which not only the outward actions, but the appetites, propensities, and affections are all amenable, and which infallibly prescribes the limits of their just exercise.

§. 429. *Of the desire of possession.*

Many things in man, and in the situation of objects around him tend to inculcate upon him the fact, that he has in some sense an independent existence, that he is an agent, that he has powers, duties, and responsibilities. He is not long in learning also, that creation is made for his use ; that, in the scale of being, human nature is preeminent, while brute aud physical nature is subordinate ; and that, in the constitution and ordering of things, a variety of objects are placed more or less directly under his own control. Under these circumstances the idea of possession is early developed, and with it a corresponding pleasure and desire. There is no difference of opinion in relation to the simple fact, that the desire of possession discloses itself at an early period, and with no small strength. And when we consider its universality, without limitation to any particular class or regard to any particular situation in life, we may well speak of it as *natural.* In other words, (which will explain the epithet *natural*, when applied in this way,) the constitution of man, operated upon by the circumstances in which he is placed, inevitably tends to this result. We suppose it will not be deemed necessary to occupy time on this subject, any further than to refer in general terms, as in other analogous cases, to childhood and youth, in illustration and proof what has been said.

§. 430. *Of the desire of power.*

The love of power has commonly been reckoned among the original Propensities. There are certainly many things in favour of this opinion. The train of thought, by which it is supported, will be understood from the following passage of Mr. Stewart.

"The infant, while still on the breast, delights in ex-

erting its little strength on every object it meets with, and is mortified, when any accident convinces it of its own imbecility. The pastimes of the boy are, almost without exception, such as suggest to him the idea of his *power*. When he throws a stone, or shoots an arrow, he is pleased with being able to produce an effect at a distance from himself; and, while he measures with his eye the amplitude or range of his missile weapon, contemplates with satisfaction the extent to which his power has reached. It is on a similar principle that he loves to bring his strength into comparison with that of his fellows, and to enjoy the consciousness of superior prowess. Nor need we search in the *malevolent* dispositions of our nature for any other motive to the apparent acts of cruelty which he sometimes exercises over the inferior animals,—the sufferings of the animal, in such case, either entirely escaping his notice, or being overlooked in that state of pleasurable triumph, which the wanton abuse of *power* communicates to a weak and unreflecting judgment. The active sports of the youth captivate his fancy by suggesting similar ideas,—of strength of body, of force of mind, of contempt of hardship and of danger. And accordingly such are the occupations in which Virgil, with a characteristical propriety, employs his young Ascanius.

> "At puer Ascanius mediis in vallibus acri
> "Gaudet equo; jamque hos cursu, jam præterit illos;
> "Spumantemque dari pecora inter inertia votis
> "Optat aprum, aut fulvum descendere monte leonem.

"As we advance in years, and as our animal powers lose their activity and vigour, we gradually aim at extending our influence over others by the superiority of fortune and station, or by the still more flatering superiority of intellectual endowments, by the force of our understanding, by the extent of our information, by the arts of persuasion, or the accomplishments of address. What but the idea of power pleases the orator in managing the reins of an assembled multitude, when he silences the reason of others by superior ingenuity, bends to his purposes

their desires and passions, and, without the aid of force, or the splendor of rank, becomes the arbiter of the fate of nations!"*

§. 431. *Of the desire of happiness.*

We shall not attempt to explore this part of our sentient nature any further than to add, that the desire of enjoyment or happiness is a part of our mental constitution. No one will presume to assert, that the desire of suffering is natural; that we ordinarily rejoice in the prospect of coming woes, and endure them with gladness of heart. Nor are there satisfactory grounds for the opinion, that enjoyment and suffering are indifferent to the human mind; and that there is no choice to be had between them. Such a supposition would be contrary to the common experience and the most obvious facts. On the contrary, our own consciousness, and what we witness in others, effectually teach us, that the desire of happiness is as natural as that of knowledge or of society, and even hardly less so, than it is to desire food and drink, when we experience the uneasy sensations of hunger and thirst.

Under the instigation and guidance of this strong propensity, men fill their granaries in anticipation of a day of want, prepare raiment and houses, resort to medicines in seasons of sickness, and take other measures for the prolonging of life, health, and comfort. It is kindly provided that they are not left, in taking precautions subservient to their preservation and well-being, to the suggestions and the law of reason alone, but are guided and kept in action by this decisive and permanent principle. And it is proper to add, that this desire operates not only in reference to the outward and bodily comforts, but also in relation to inward consolations, the inspirations and solaces of religion in the present life, and the anticipated possession of that more glorious happiness, which religious faith attaches to a future state of existence.

*Philosophy of the Moral and Active Powers, Chap. II, 4.

CHAPTER FOURTH.

THE AFFECTIONS OR PASSIONS.

§. 432. *Nature and general division of the affections.*

UNDER the general head of Desires, it seems proper to include the Affections, or passions; although the latter are complex, and not simple states of mind. The feeling of desire, however, makes a characteristic and prominent part of them. The term *affections* is used, therefore, to denote a state of mind, of which some simple emotion is always a part, but which differs from any single simple emotion, in being combined with some form of that state of the mind called *desire*. "As to every sort of passion, (says Kaimes* who uses the word passions as synonymous with affections,) we find no more in the composition but an emotion pleasant or painful, accompanied with desire." —It may properly be added here, that, in consequence of this complexity, the passions have a character of permanency, which is not found to belong to any separate emotions.

The Affections might conveniently be divided into three classes; the Benevolent, or those which consult the good and happiness of others; the Selfish, or those which chiefly consult our own preservation and pleasure; and the Malevolent, or those which imply a feeling of ill-will, and a desire of injury to others. We merely refer, how-

* Elements of Criticism, Part I; Ch. 2.

ever, to these distinctions, the recollection of which may perhaps aid in the clearer understanding of the subject, and in the correct application of epithets; but without designing, or considering it necessary to make them particularly prominent.

§. 433. *Of the affection of love.*

In going into an examination of this subject we shall first consider the affection or passion of LOVE; (it may be remarked here that we employ the terms affections and passions as of essentially the same import.) There are many modifications or degrees of this passion; the mere preference of regard and esteem, the warmer glow of friendship, and the increased feeling of devoted attachment. There are not only differences in degree, the passion itself seems to be modified and to be invested with a different aspect according to the circumstances, in which it is found to operate. The love, which we feel for our friends, is different from that, which we feel for a parent or brother; and both are different from that, which we feel for our country. But it is impossible to convey in words the precise distinctions, which may justly be thought to exist both in kind and degree. Such an attempt would only involve the subject in greater confusion.

The passion under consideration is a complex one, and we may discover in it at least two elements; viz., an emotion of vivid delight in the contemplation of the object, and a desire of good to that object. Hence there will always be found in the object some quality, either some excellence in the form, or in the intellect, or in the moral traits, or in all combined, which is capable of exciting a pleasurable emotion. There is a pleasing emotion, antecedent to the desire of good to the object, which causes it; but this happy feeling continues to exist, and to mingle with the subsequent kind desire. And there may be supposed to be a constant action and reaction,—the desire of good increasing the strength of the pleasurable emotion, and the mere feeling of delight enhancing the benevolent desire.——When the kind desire, which is one of the ele-

ments of love, is not excited merely in consequence of our having experienced the antecedent pleasurable emotion, but in consequence of regarding that pleasurable emotion, as indicative of qualities, to which the unalterable voice of nature pronounces, that our affections may be justly given, it is then a pure and exalting feeling. As to how far this purity of feeling exists, there may undoubtedly be a difference of opinion ; but just so far as it does, there is a glow of the heart, analogous to the devotional feelings of a higher and happier state of being.

§. 434. *Of sympathy.*

Sympathy, by the common use of languages, implies an interest in the welfare of others, and may be considered in two respects, being either an interest in their joy, or an interest in their sorrow. The sympathetic man falls in with the requisition of Scripture, rejoicing with those, who rejoice, and weeping with those, who weep. His heart kindles up with happiness at beholding the happy, and he sheds the tear for the miserable.——But that sympathy, which rejoices with the rejoicing, is only one of the forms of love. In an analysis of our passions, it is entitled to no separate place. Like love it is a feeling of delight, combined with benevolent desires towards the object of it. It is only the sympathy for sorrow, which can have a distinct consideration in the list of our passions.

Some have thought, that sympathy for sorrow is only a modification of love ; but we may discover a difference between them. We can sympathize in the griefs of those, in whom we are able to discern no pleasing qualities, and even with those, who are positive objects of hatred. We leave it to the feelings of any one to determine, Whether, if he saw even his enemy perishing with hunger in a dungeon, or his limbs broken on the rack, he would not harbour a relenting emotion, and be glad at his rescue? If so, sympathy for grief is different from love, for we may sympathize with those, whom we do not, and cannot love ; and consequently, is to be considered a distinct passion.

§. 435. *Of gratitude.*

The affection of GRATITUDE also, which we are next to consider, approaches in its character to the more general passion of love. Like the last named passion, it includes an emotion of pleasure or delight, combined with a desire of good or a benevolent feeling towards the object of it. But we never give the name of gratitude to this combination of pleasing and benevolent feeling, except it arises in reference to some benefit or benefits conferred, ——No small part of that strong feeling, which is exercised by children toward parents, is that species of love, which is termed gratitude. They think of them, not only as possessing many qualities, which are estimable and lovely in themselves; but as fond and unwearied benefactors. They cannot behold, without having their feelings strongly moved, their earnest disposition to relieve their sufferings, to supply their wants, to enhance their enjoyments.

Different individuals exhibit considerable diversity in the exercise of grateful emotions. Some receive the favours heaped upon them without exhibiting any visible returns of benevolent regard; others are incapable of a passive reception of benefits, and are strongly affected, whenever they are conferred. This difference is probably owing in part to original diversities of constitution; and is partly to be ascribed to different views of the characters and duties of men, or to other adventitious circumstances.

§. 436. *Of the parental affection.*

If there be any affection whatever, which is entitled to be considered a natural affection, it is that, which is entertained by parents for their children. Commencing at the birth of its beloved object, it does not merely maintain its original vigour and freshness, but increases them. In all the vicissitudes of life, amid all suffering and dishonour and ingratitude, it remains a sacred and imperishable monument of the wisdom and goodness of the being, who has implanted it. Can it be thought necessary to enter into a formal proof of the existence of an affection,

which is predominant in all classes of society from the throne to the cottage? Where can the parent be found so brutal as not to recognize its sway? Where especially is the mother, who is unwilling to make any sacrifice for her child, even that of life itself? In the year 1807, a British ship took fire in the straits of Bosphorus. Among the multitude on board of her was an unfortunate mother with her infant child. She had no care for herself; she made no effort to escape; but committing her child to the protection of an officer, calmly awaited her destiny, consoled and sustained by the hope, that her offspring might possibly live. Amidst the exertions of the officer, which were necessary in such an emergency, the infant dropped into the sea. The unhappy mother, as soon as she had discovered what had happened, plunged from the vessel's side, as if to preserve it, and sinking in the billows, was seen no more.*

This case, affecting as it is, is not mentioned as a solitary one. It may be considered as only a fair exemplification of the disinterestedness and strength of that exalted passion. Amid scenes of depravity, which shock every honourable sentiment, and evince the extinguishment of all other ennobling principles, this is still found, and sheds its cheering light on the darkness around it.

§. 437. *Further remarks on the parental affection.*

In asserting, that the parental affection necessarily and naturally arises under its appropriate circumstances, we are not ignorant, that a different view has sometimes been taken, and that its existence has been attributed solely to reason. In other words it has been maintained, that parents cherish their offspring with great care and fondness, because a very little reflection and examination cannot fail to teach them, that it is both their interest and their duty so to do. In answer to this view, we propose the following considerations.——I, This explanation does not seem to meet fully the facts in the case. Not in one

* Illustrations of the Passions, Vol. I, p. 148.

case in a thousand and perhaps never, does the parental affection present the aspect of mere preference or choice, founded on prudential considerations. That passion, which cannot arise till subsequently to the long and calm deductions of reason, will be likely to exhibit a want of fervour and intensity, not at all corresponding to the heated and quenchless flame of parental love. And besides, reason would make distinctions. Reason would require some parents to love their children, because they are healthy and active, and well formed and beautiful; and on like grounds, would impose on others a diminution of their affection, because their children are sickly and maimed, and destitute of personal charms. But the slightest examination into facts will assure us, that parental love does not graduate itself on these principles. Every parent loves his diseased and deformed child, who will always be a tax on his time and property and patience, with as much ardour as those that are not so; and perhaps in most cases with greater intensity.

He can sympathize with the feelings of the celebrated Bunyan, when about to be thrown into prison, who deeply lamented his separation from his family, as the pulling the flesh from the bones; "especially my poor blind child, who lay nearer my heart than all besides. Oh, the thoughts of the hardships I thought my poor blind one might undergo would break my heart to pieces! Poor child; thought I, what sorrow art thou like to have for thy portion in this world! Thou must be beaten; must beg; suffer hunger, cold, nakedness, & a thousand calamities, though I cannot now endure the wind should blow upon thee!"*

II,–There is another difficulty in the proposed explanation. If the parental affection be founded on reason, then it would seem to follow, that the strength of the affection will be proportioned to the developement and strength of the reasoning power. A man of great powers of reasoning, who can estimate fully all the benefits con-

*Southey's Ed. of Pilgrim's Progress, p. lxx.

nected with the filial and parental relation, will love his offspring more than another; and civilized nations will have stronger parental attachments than savage nations. But neither of these is true; no such line as this can be drawn; on the contrary it can be satisfactorily shown, that the affection exists with peculiar strength among the poor, the ignorant, and the savage.

Go into the gloomy and unvisited forests of America; enter the wigwam of the most untutored Indian, whose walls are perhaps darkened with the reeking memorials of conquered enemies, and you will see even there the invincible workings of nature, the ardent and quenchless outbreakings of parental tenderness; you will not fail to discover, that his children are the joy and pride even of the fierce Savage, and that for them he is willing to toil, and suffer, and even to die. Go to ignorant, wretched and barbarian Africa, to the shores of the Tschad & the Quorra, and nature is still the same; the finger of God is written upon the heart. Whenever you meet with mothers, who have lost a child, you see them bearing about wooden figures, the rude but sacred imitations of their lifeless offspring. Nothing can induce them to part with these little memorials, consecrated to their sorrow and their love. They carry them about for an indefinite time. Whenever they stop to take refreshment, a small portion of their food is invariably presented to the lips of these images of the dead.* What a striking testimony have we here, that this strong passion exists in all climes and countries, and among all classes, however debased by ignorance and superstition.

III,—If reasoning be the foundation of the parental affection in men, we should naturally be led to give the same explanation of its origin in brute animals. But, although the passion exists among them with equal strength, no one thinks of applying the proposed explanation there. Now if the existence of an original principle, operating independently of reason, be necessary in brute animals,

* Lander's Journal of an Expedition in Africa, Vol. 1. pp. 120,5.

there seems to be a like necessity for its existence in the human race. This must be obvious when we consider, that the wants, which the passion is calculated to meet, are of the most urgent and pressing kind, and that the human race could not be perpetuated without it. The human infant is more helpless and dependent than the young of the brute animal; and this helplessness and dependence continue for a longer time. If it be said that human reason is far higher than that of the lower animals, it will not be pretended, that it is high enough to meet the extreme exigency of the present case. It is not at all to be credited that mere reasoning, that cold and calculating deduction could support the untiring watchfulness and patience and labour, incident to the parental relation, without the aid of an original principle deeply rooted in the heart, and always ready for action.

§. 438. *Of the selfish affection or passion of pride.*

In considering what may be termed the selfish affections, our attention is naturally given to that of Pride. This passion like all others has an object; and the object is a consciousness or belief of some superiority in ourselves. The complex affection, called forth in view of this actual, or supposed superiority, involves a pleasing emotion, accompanied with a desire, that others should be sensible of that excellence or eminency which we possess over them. It ought to be added, that the desire of the proud person to make his superiority known, is limited by personal considerations, and has no higher object than his own gratification. When the passion, in its true and appropriate form, exists, it cannot possibly be identified with anything great or ennobling.

There are many modifications of this, no less than of the other passions. When it is very officious, and makes an ostentatious display of those circumstances, in which it imagines its superiority to consist, it is termed VANITY. When it discovers itself, not so much in the display of the circumstances of its superiority as in a contempt, and in

sneering disparagements of the inferiour qualities of others, it is termed HAUGHTINESS or ARROGANCE.

The passion of pride is not limited to the possession of any one object or quality, or to any single circumstance or combination of circumstances. One is proud of his ancestry, another of his riches, and a third of the beauty of his dress or person. It is the same feeling in the statesman, and the jockey; in the leader of armies and the hunter of hares and foxes; in the possessor of the princely palace, and of the well wrought cane or snuff-box.

Some have thought, that many good results, connected with human enterprize and efforts, may be justly ascribed to the influence of this passion. On the other hand, it has been maintained, that there are other principles of action of a more generous and ennobling kind, which might accomplish, and ought to accomplish all, which has been attributed to this. Certainly a little reflection, a little insight into our origin, infirmities, and wants, would tend to diminish the degree of it, if nothing more. "If we could trace our descents, (says Seneca,) we should find all slaves to come from princes, and princes from slaves. To be proud of knowledge is to be blind in the light; to be proud of virtue, is to poison ourselves with the antidote; to be proud of authority, is to make our rise our downfall."

§. 409. *Of fear.*

The affection or passion of fear always implies, and is founded on the conviction of some danger. It accordingly involves a simple emotion of pain, caused by an object which we anticipate will be injurious to us, attended with a desire of avoiding such object or its injurious effects.

It cannot be doubted, that this passion is implanted in man for wise and good purposes; but we, nevertheless, properly call it a *selfish* passion, since it has reference almost exclusively to our own preservation. And not unfrequently this trait is so predominant, that it impels men to sacrifice their own kindred and friends.

The strength or intensity of fear will be in proportion

to the apprehended evil. There is a difference of original susceptibility of this passion in different persons; and the amount of apprehended evil will, consequently, vary with the quickness of such susceptibility. But whatever causes may increase or diminish the opinion of the degree of evil, which threatens, there will be a correspondence between the opinion, which is formed of it, and the fearful passion.

When this passion is extreme, it prevents the due exercise of the moral susceptibility, and interrupts correct judgment of any kind whatever. It is a feeling of great power, and one that will not bear to be trifled with. It may serve as a profitable hint, to remark, that there have been instances of persons thrown into a fright suddenly, and perhaps in mere sport, which has immediately resulted in a most distressing and permanent mental disorganization.——In cases, where the anticipated evil is very great, and there is no hope of avoiding it in any way, the mind exists in that state, which is called DESPAIR.

§. 440. *Of the passion of hatred.*

The passion of HATRED, which may properly be termed a Malevolent one, is the opposite to that of love. And as the latter was found to be complex, the former also may be separated into opposite, though analogous elements, viz. an emotion of pain, and a desire of injury to the object or cause of the painful feeling. For a correct notion, however, of this passion, as well as of its opposite, we must resort to our own experience. Some have maintained, that the malevolent affections, in the present condition of the world, are necessary and commendable; that without them frauds and oppressions would come boldly forth into the great community of mankind. It cannot be denied, that a spirit of watchfulness and of retribution is necessary; but it is not so evident that there is need of malevolence. The Supreme Being is a sovereign, who does not grant impunity to sin; but he is represented as correcting with the feelings of a parent, and as

jealous person loves. The feeling of suspicious rivalship, which often exists between candidates for fame and power, is sometimes called jealousy on account of its analogy to this passion.——There are various degrees of jealousy, from the forms of mere distrust and watchful suspicion, to its highest paroxysms. In general the strength of the passion will be found to be in proportion to the value, which is attached to the object of it; and is perhaps more frequently found in persons, who have a large share of pride, than in others. Such, in consequence of the habitual belief of their own superiority, are likely to notice many trifling inadvertencies, and to treasure them up as a proof of intended neglect, which would not have been observed by others, and certainly were exempt from any evil intention.

The person under the influence of this passion is incapable of forming a correct judgment of the conduct of the individual, who is the object of it; he observes every thing and gives it the worst interpretation; and circumstances, which, in another state of the mind, would have been tokens of innocence, are converted into proof of guilt. Although poetry, it is certainly no fiction;

> ————"Trifles, light as air,
> "Are to the jealous confirmations strong,
> "As proofs of holy writ.

It may be remarked of this passion, that it is at times exceedingly violent. At one moment the mind is animated with all the feelings of kindness; the next, it is transported with the strongest workings of hatred, and then it is suddenly overwhelmed with contrition. Continually vacillating between the extremes of love and hatred, it knows no rest; it would gladly bring destruction on the object, whom it dreads to lose more than any other, and whom at times it loves more than any other.——See Cogan's Treatise on the Passions, and Brown, Lect. lx. lxv.

PART THIRD.

SENTIENT STATES OF THE MIND.

CLASS THIRD,

FEELINGS OF OBLIGATION.

CHAPTER FIRST.

NATURE OF OBLIGATORY FEELINGS.

§. 443. *The existence of these feelings evinced by consciousness.*

UNDER the general head of the Sentient part of our constitution, we next proceed to consider a very important class of mental states, which, for the want of a single term expressive of them, we shall call *feelings or sentiments of obligation.* We cannot doubt of its being readily admitted, that these feelings belong to the Sentient constitution, in distinction from the Intellectual. It may be safely asserted on the testimony of consciousness, that they are different from the mere acts of the understanding, from mere thought, from mere intellectual perceptions. Independently of the intimations of consciousness in this particular, which of themselves decisively indicate the propriety of this arrangement, they have this important characteristic in common with other developements of the sentient nature, that they are most intimately and effectively connected with action. It must be obvious, that all intellectual states of the mind are inefficient in this respect, except so far as they arouse to action by the circuitous pro-

CHAPTER FIRST.

NATURE OF OBLIGATORY FEELINGS.

§. 443. *The existence of these feelings evinced by consciousness.*

UNDER the general head of the Sentient part of our constitution, we next proceed to consider a very important class of mental states, which, for the want of a single term expressive of them, we shall call *feelings or sentiments of obligation*. We cannot doubt of its being readily admitted, that these feelings belong to the Sentient constitution, in distinction from the Intellectual. It may be safely asserted on the testimony of consciousness, that they are different from the mere acts of the understanding, from mere thought, from mere intellectual perceptions. Independently of the intimations of consciousness in this particular, which of themselves decisively indicate the propriety of this arrangement, they have this important characteristic in common with other developements of the sentient nature, that they are most intimately and effectively connected with action. It must be obvious, that all intellectual states of the mind are inefficient in this respect, except so far as they arouse to action by the circuitous pro-

cess of operating through the emotions, desires, volitions, &c.

Our first inquiry, although it will perhaps be considered an unnecessary waste of time, has relation to the actual and distinct existence of obligatory feelings. The existence of feelings of this description, is evinced, in the first place, by our own consciousness. We might safely appeal to the internal conviction and the recollections of any man whatever, and ask, whether there have not been periods in the course of his life, in which he has experienced a new and authoritative state of mind; a peculiar, but undefinable species of mental enforcement, which required him to perform some particular act, and to avoid doing some other act, even when his interests and his desires seemed to be averse to the requisition thus made upon him? And if so, we have here an instance of moral obligation, a feeling or sentiment of duty, the precise thing which is meant, when we say we *ought* to do, or *ought not*, to do.

Take a common, and simple illustration. A person, in passing along the streets, saw an old man sitting by the way side, who bore about him the most convincing marks of want, wretchedness, and sincerity in his applications for relief; he gave him bread, clothing, and money, conscious that it was done, not in view of any personal interest or gratification, or of any selfish object whatever, but under the impulse and guidance of this peculiar enforcement within; and if so, he then and there had a distinct knowledge of the moral sentiment or feeling under consideration. And this knowledge was from consciousness.

§. 444. *Further proof from the conduct of men.*

The existence of feelings of obligation is further shown by the general conduct of men.—It cannot be denied, that other motives, distinct from convictions of duty, often operate upon them. Their desires, hopes, fears, sympathies, their present and future interests all have an effect. But it would certainly argue an evil opinion of human nature altogether unwarranted, to maintain, that

they are never governed by motives of a more exalted kind. In a multitude of cases they are found to perform what is incumbent upon them, in opposition to their fears, in opposition to their sympathies, and their apparent interests. Different persons will undoubtedly estimate the amount of interested motives as greater or less, according as a greater or less portion of the good or evil of human nature has come within their own cognizance; but it is impossible, after a cautious and candid review of the principles of human action, to exclude entirely the elements of uprightness and honour. If there is any truth in history, there have always been found, even in the most corrupt periods of society, upright and honourable men. And if we are at liberty to infer men's character from their actions, as assuredly we are, we may assert with confidence, that there are such at the present time. But a man of true uprightness and honour is one, who acts from the sentiment of duty, the feeling of moral obligation, in distinction from motives of an inferior kind.

§. 445. *Further proof from language and literature.*

The existence of obligatory feelings is further proved, not only by each one's consciousness, and by the conduct of men generally, but by language and literature. In most languages and probably in all, there are terms expressive of obligation or a sense of duty. No account could be given of the progress of society, and of the situation and conduct of individuals without making use of such terms. If the words rectitude, crime, uprightness, virtue, merit, vice, demerit, right, wrong, ought, obligation, duty, and others of like import were struck out from the English tongue, (and the same might be said of other languages,) it would at once be found unequal to the expression of the phenomena, which are constantly occurring in the affairs of men. Now as these terms occur, it is rational to suppose, that they intimate something, that they have a meaning, that they express a reality. But it does not appear, how this can be said of them,

unless we admit the actual existence of obligatory feelings.

Turning our attention from single words and phrases, if we enter into an examination of the literature of a language, we shall come to the same result.——A great portion of every nation's literature is employed in giving expression and emphasis to moral principles and sentiments. They find a conspicuous place in the most valuable speculations, not of professed moralists merely, but of historians, poets, orators, legislators, &c. But their frequent introduction would seem to be altogether misplaced, unsuitable, and unmeaning, if there were no real and permanent distinction between virtue and vice, between the sacred requisitions of duty and those of mere personal interest. One of the Roman historians* very happily remarks of the elder Cato, that he never performed an upright action, in order that he might have the appearance of being an upright person in the view of men, but because *he could not do otherwise*; (qui nunquam recte fecit, ut facere videretur, sed quia aliter facere non poterat.) Every one, who is familiar with the characteristic traits of Cato, will assent to the justness of the remark; but still it would be nugatory and unmeaning, without the existence of original principles, involving an internal and moral obligation. If any one will take the pains to peruse the writings of Tacitus in particular, he will fully see the bearing of these observations. That celebrated historian sketches, in colours dark and terrible, the pictures of cruelty and selfishness, treachery and deceit, but at the same time he diffuses over the nether horrors of flame and smoke the sunlike radiance of benevolence, patriotism, and truth. Now if you strike out from the human breast the emotions of approval and disapproval, and those feelings of obligation, which are subsequently built upon them, you necessarily strike out, not only from Tacitus, but from almost all historians of acknowledged merit, the most eloquent and ennobling passages; every thing in

* Paterculus.

fact, which places truth in opposition to falschood, and contrasts meanness and selfism with justice, rectitude, and honour.

§. 446. *Further proof from the necessity of these feelings.*

And in connection with the observations which have been brought forward, we may further ask, what would men be, or what would society be, without this basis of moral obligation? There must be somewhere a foundation of duty. It does not appear, how the bond, which unites neighbourhoods and states, can be maintained with any degree of strength, without something of this kind. Annihilate this part of our constitution, and would not society be dissolved? Would not violence and wrath and utter confusion immediately succeed? The sympathies and the selfish interests of our nature might do something by way of diminishing these evil results, but could not wholly prevent them. With the dislocation of the great controlling principles, which regulate the action of the moral world, there would soon be an utter confusion in the movements of society, and all the unspeakable evils, attendant on such a state of things.

We are aware it can be said, that we have the feelings of approval and disapproval, which are of a moral nature. This is true. By means of those feelings we are enabled to pronounce a speedy decision on the merit or demerit of the conduct of others; but of themselves they seem to have no controlling power over our own actions. It is undeniably necessary, when we consider the various relations we sustain to other accountable beings, that we should be able to pass a judgment on them. And it appears equally necessary, when we consider our own nature and destinies, that there should be moral principles within us, regulating our own conduct. Undoubtedly the two classes of feeling are closely connected; emotions of approval and disapproval are antecedent to, and are the foundation of feelings of obligation; but the fact of their close connection does not prove their identity. Both exist and both are neces-

sary. With the one class alone, we might pass a right decision on others, but would be liable constantly to go wrong ourselves. With the other class alone, we should go right ourselves, but could have no knowledge of right and wrong in others. So that the absence of either, particularly of feelings of obligation, would have a disastrous bearing on the conduct of men, and on the various interests of society.

§. 447. *Feelings of obligation simple and not susceptible of definition.*

In view of what has been said we assert with confidence, that the feelings in question exist. In looking into their nature, although we do not flatter ourselves with being able, by a mere verbal statement, to give a satisfactory notion of them, we would direct the attention to some characteristic marks. And the first observation to be made is, that these states of mind are simple. We cannot resolve them into parts, as we can any complex state of mind. And as a necessary consequence of this, they are not susceptible of definition. Still we cannot admit, that this simplicity and the consequent inability to define them renders men ignorant of their nature. It is true, that the man, who has never experienced the sentiment of obligation in his own bosom, can have no better means of knowing it from the descriptions of others, than the blind man can have for understanding the nature of the colours of the rainbow. But such a case is hardly a supposable one: among all the tribes of men and amid all the varieties of human degradation, it will probably not be found to exist; and we may therefore say with confidence, that every man knows what the feeling of obligation is, not less than he knows what the feeling of joy, of sorrow, and of approval is. In other words, men have as ready and clear an idea of it, as of any other simple notion or feeling.

§. 448. *They are susceptible of different degrees.*

In obtaining this knowledge, however, which evidently cannot be secured to us by any mere process defining,

we must consult our consciousness. We are required to turn the mind inward on itself, and to scrutinize the process of interiour operation, on the various occasions of endurance, trial, and action, which so often intersect the paths of life. The same consciousness, which gives us a knowledge of the existence of the feeling and of its general nature, assures us furthermore, that it exists in various degrees. This fact may be illustrated by remarks formerly made in reference to another state of mind. The word *belief* is the name of a simple mental state; but no one doubts, that belief exists in different degrees, which we express by a number of terms, such as presumption, probability, high probability, and certainty. In like manner, the feeling of obligation may evidently exist in various degrees; and we often express this variety of degrees by different terms and phrases, such as moral inducement, slight or strong inducement, imperfect obligation, perfect obligation, &c.

§. 449. *Of their authoritative and enforcing nature.*

It may be remarked further in respect to obligatory feelings, that they always imply action, something to be done. And again they never exist, except in those cases, where not only action, but *effective* action is possible, or is supposed to be so. We never feel under moral obligation to do any thing, which we are convinced at the same time is beyond our power. It is within these limits the feeling arises; and while we cannot define it, we are able to intimate, though somewhat imperfectly, another characteristic. What we mean will be understood by a reference to the words enforcement, constraint, or compulsion. Every one is conscious, that there is something in the nature of feelings of moral obligation, approaching to the character of enforcement or compulsion; yet not by any means in the material sense of those terms. There is no enforcement,analogous to that which may be applied to the body, and which may be made irresistible.

The apostle Paul says, "the love of Christ *constraineth* us." What is the meaning of this? Merely that the mer-

cy of Christ, exhibited in the salvation of men, excited such a sentiment of obligation, that they found in themselves a great unwillingness to resist its suggestions, and were determined to go forth, proclaiming that mercy, and urging all men to accept it. And it is in reference to this state of things we so frequently assert, that we are bound, that we are obliged, or even that we are compelled to pursue a particular course in preference to another course; expressions, which, in their original import, intimate the existence of a feeling, which is fitted by its very nature strongly to control our volition. But, although these expressions point to this trait of the feeling, they do it but imperfectly and indistinctly, and consciousness alone can give a full understanding of it.

§. 450. *Feelings of obligation differ from those of mere approval and disapproval.*

It is possible that the question may be started why we do not class these feelings with Emotions, particularly those of a moral kind. And recognizing the propriety of avoiding an increase of classes, where it is not obviously called for, we do not decline answering the question.—We have not classed the mental states under examination with Emotions, in the first place, because they do not appear to be of that transitory nature, which seems to be characteristic of all emotions. Ordinarily they do not dart into the soul with the same rapidity, shining up, and then disappearing like the sudden lightning in the clouds; but taking their position more slowly and gradually, they remain like the sun bright and permanent. In the course of an hour a person may experience hundreds and even thousands of emotions of joy or grief, of beauty or sublimity, and various other kinds. They come and go, return and depart again in constant succession and with very frequent changes; but it probably will not be pretended, that the feelings of duty, which, are destined to govern man's conduct, and which constitute his most important principles of action, are of such a rapid, variant, and evanescent nature. A man feels the sentiment of duty now, and it is

reasonable to anticipate, unless the facts, presented to his mind, shall essentially alter, that he will feel the same to-morrow, next week, next month, and next year. He may as well think of altering and alienating the nature of the soul itself, as of eradicating these feelings, when they have once taken root, so long as the objects, to which they relate, remain the same in the mind's view.

§. 451. *Further considerations on the same subject.*

A second reason for not classing feelings of obligation with emotions, particularly moral ones, is the fact, that obligatory sentiments have special reference to the future. Moral emotions are of a peculiar kind; they have a character of their own, which is ascertained by consciousness; but they merely pronounce upon the character of objects and actions, that are either past or present; upon the right or wrong of what has actually taken place in time past, or is taking place at the present moment; with the single exception of hypothetical cases, which are brought before the mind for a moral judgment to be past upon them. But even in these cases, as far as the action of the moral sense is concerned, the objects of contemplation are in effect present. The conscience passes its judgment upon the objects in themselves considered; and that is all. It goes no further.

But it clearly seems to be different with the feelings under consideration. The states of mind, involving obligation and duty, have reference to the future; to something, which is either to be performed, or the performance of which is to be avoided. They bind us to what is to come. They can have no possible existence, except in connection with what is to be done, either in the inward feeling or the outward effort. The past is merged in eternity, and no longer furnishes a place for action. Obligation and duty cannot reach it, and it is given over to retribution.

Another and third important circumstance to be taken into view, in making out the distinction under our notice, is, that the sentiments or feelings, of obligation are always

subsequent in point of time to moral emotions; and cannot possibly exist, unless preceded by them. The statement is susceptible of illustration in this way. Some complicated state of things, involving moral considerations, is presented before us; we inquire and examine into it; emotions of approval or disapproval then arise. And this is all that takes place, if we ourselves have, in no way whatever, any direct and active concern, either present or future. But if it be otherwise, the moral emotions are immediately succeeded by a distinct and imperative feeling, the sentiment of obligation, which binds us, as if it were the voice of God speaking in the soul, to act or not to act, to do or not to do, to favour or to oppose. How common a thing it is for a person to say, that he feels no moral obligation to do a thing, because he does not approve it; or on the contrary, that, approving any proposed course, he feels under obligation to pursue it; language, which undoubtedly means something, and which implies a distinction between the mere moral emotion and the feeling of obligation; and which tends to prove the prevalence of the common belief, that obligation is subsequent to, and dependent on approval or disapproval.—— On looking at the subject in these points of view, we cannot come to the conclusion to rank feelings of obligation with moral emotions, or with any other emotions; but are induced to assign them a distinct place. But it is not surprising on the whole, that moral emotions are often confounded with them, when we consider the invariable connection between the two just spoken of, and when also we consider the imperfection of language, which not unfrequently applies the same terms to both classes of mental states.

§. 452. *Feelings of obligation differ from desires.*

For the reasons which have now been stated, feelings of obligation are not classed with Emotions. We are next asked perhaps, why they are not classed under the general head of Desires. And in answering this question, we say in the FIRST place, that consciousness clearly points

out a difference. It is believed, that few matters come within the reach and cognizance of consciousness, which can be more readily decided upon, than the difference between our desires and our feelings of obligation. We admit, that, in the particular of their fixedness or permanency and also of their relation to the future, the latter closely approach to the characteristics of the former; and yet a little internal examination will detect a distinction between them, which is marked and lasting.

(2) We may not only consult our own consciousness in this matter, but may derive information from a notice of the outward conduct of men. In speaking of men's conduct, we not unfrequently make a distinction; and we attribute it sometimes to the mere influence of their desires or wishes, and at other times to the predominance of a sense of duty, which is only another name for a sentiment or impulse within, which is morally obligatory. But there would evidently be no propriety in this distinction, if desire and feelings of duty were the same thing; and it would certainly be premature and unjust to charge men with universally making such a distinction, when there are no grounds for it.

§. 453. *Further considerations on this subject.*

(3) If there is not a fixed, permanent, and radical distinction between desires and feelings of obligation, then there is an utter failure of any basis of morality, either in fact or in theory. It will readily be conceded, that morality implies a will, a power of choice and determination. But the conscience does not reach the Will directly. Those emotions of moral approval or disapproval, which are properly ascribed to Conscience, operate on the will through feelings of obligation; that is, they are always succeeded by the latter feelings, before men are led to action. All other emotions operate through the Desires. So that the will, in making up its determinations, takes immediate cognizance of only two classes of mental states, viz. Desires and Feelings of obligation. But brute animals have all the desires, that men have; we

mean all those modifications of feeling, which have been classed under that general head, viz. instincts, appetites, propensities, the various forms of affection, as hatred, love, the parental affection, &c. But still, being evidently destitute of all feelings of obligation, we never speak or think of them as possessing a moral character. We never applaud them for doing their duty, nor punish them for neglecting its performance. Our treatment of them proceeds on altogether different principles. And it would be the same with men, if they were wholly destitute of feelings of moral obligation, and had no motives of action but the various forms of desire. They could never, in that case, be considered morally accountable. They would be without reward, when they went right; and without rebuke, when they went wrong.

CHAPTER SECOND.

ORIGIN OF FEELINGS OF OBLIGATION.

§. 454. *Feelings of obligation not founded primarily on law or command.*

In what has been said so far, we have attempted to establish, in the first place, that there is such a thing as the feeling of obligation; and in the second place, to show, so far as it can be done by words, what its nature is. Another inquiry proposes itself, viz, What is the origin or foundation of the feeling of obligation? What is its basis? On what occasion does it necessarily arise?

In pursuing this inquiry, the first remark to be made is, that the feeling of obligation is not founded primarily and originally on Law; that is, on any thing commanded or ordered. In other words, the mere direction or ordering by any Being, however powerful he may be, does not of itself constitute right, and of course does not necessarily furnish a basis for the feeling of obligation, on the part of those, to whom such direction or order is given. Men live constantly under the operation and influence of law in some shape or other; and of law too, which is effective and irresistible. But does any one feel, or any one suppose, that law and right are necessarily synonymous? Take the simplest possible case. The commands of parents are a law to children and youth; but in some cases undoubtedly these children and

youth feel with very good reason, that the commands of their parents are not right but wrong, and when they obey under such circumstances, they do it, not from a conviction of obligation or duty, but from an apprehension of the consequences of disobedience.

Again, the laws of the land are a rule of action; the subjects of a civil government do not ordinarily deem it expedient to resist them; and yet how often in conversation they pronounce one law to be just, & another unjust, one to be right, and another to be wrong. A man would be considered exceedingly and even foolishly charitable, who should pronounce every enactment of the civil government just and righteous, merely because it happened to be an enactment, a peremptory order, or law. If the mere power to command and control necessarily lays a foundation of the obligation to obey, it would be impossible to justify resistance to any civil government, however tyrannical and cruel it might be.

And we might extend these views, (and we would hope without incurring the charge of irreverence,) even to the Divine Law. While we most readily admit, that the Divine Law is perfectly right and good, we do not hesitate to deny, that this moral perfection is based on the mere fact, that the Divine Law proceeds from a being, who commands what he pleases, and can enforce his commands. It certainly cannot require much reflection to understand the inadmissibility of such a view. It is admitted, that God is just and right in his commands, but if his character should change and he should become fierce and cruel, the mere fact of his commanding a cruel action could never secure a cheerful obedience from men, while they remain the same as at present. There would evidently be a violent opposition and conflict between his commands and the suggestions of our moral nature. To-day God commands us to relieve the poor and suffering, and we feel it to be right; to-morrow he changes his character, and commands us to afflict the afflicted, and to pluck the bread from the hungry; but if man felt the moral correctness of the other, as he would do, he could

not possibly feel the moral correctness of this. The latter command, though enforced with almighty power, could not fail to look dark, cloudy, and diabolical. Although it should be asserted with due reverence and caution, it is undoubtedly the fact that the mind of man may sit in judgment, not only on himself and his fellow men, but on his Creator also. God himself, who formed the human mind, has decided and chosen, that men should have this power. And in proof of what has been said, how often does that glorious Being appeal to men in his own Scriptures and invite them to sit in judgment on his own doings! "Oh, my people, what have I done unto thee? And wherein have I wearied thee? testify against me." "Come now, and let us reason together, saith the Lord." Such is the language, in which the most exalted of beings condescends to address the children of men. And again He says in a tone of authority and rebuke, "Yet ye say, the way of the Lord is not equal. Hear now, Oh house of Israel, is not my way equal? Are not your ways unequal?"* He then goes on to state the great principles of his moral government, his punishment of the wicked and his preservation of the righteous, and appeals to them as judges, whether he is not just.——Such language evidently appears to be unmeaning, unless we suppose there is in man a power of judgment, a susceptibility of moral emotions and of feelings of obligation. It is an important consideration, that these powers are thus solemnly recognized by God himself, who is the author of them. He has not only appealed to their decisions in the present life; but on a more solemn occasion yet to come, at the last great day, the sentence will be passed by every delinquent himself, and he will stand condemned by his own conscience.

§. 455. *Further illustrations of the same subject.*

We may perhaps receive some little illustration of this subject from the case of the Atheist. The doctrine, which we are controverting, is simply this,—the foundation of feelings of moral obligation is command or law; and as

* Ezekiel 18th, 29. Micah 6th, 3. Isaiah 1st, 18.

the will of God is paramount to all other command or law, we are to look to that will for the ultimate ground and source of the sentiment of obligation —But do we not find a difficulty here in this fact, that the atheist, who knows no God, and of course no will of God, still has the sentiment or feeling of duty, as well as other men. It would be essentially unjust and false, to assert, that the atheist is destitute of conscience, or exempt from moral obligation. On the contrary he feels himself, in a multitude of instances, to be morally bound, as we may clearly learn both from his own acknowledgements and from his conduct, which evinces, that he is often subject to a moral control. It is true, that he has contrived, by a perversion of intellect, virtually to banish God from his own Creation, where his existence and glories are so clearly displayed; but he has not been able, by any contrivance or effort whatever, to destroy in his own bosom the sentiments of right and wrong, and annul the immutability of moral distinctions.

§. 45. *Moral obligation not dependent on the results of actions.*

Again, the source of moral obligation is not founded in a perception of the good or evil results of actions.—There is no doubt of its being a common doctrine, that whatever action is attended with ultimate happiness is *right*; and that whatever action is attended with ultimate evil or misery, is *wrong*. That this may be the fact is not denied. On the contrary, it is undoubtedly true, that there is an established and unshaken coincidence between right and happiness, between wrong and misery. Nevertheless it is not true, that the sense of obligation is founded necessarily on the antecedent perception of such coincidence. A few remarks will help to show this.

(1) The human mind is so limited in its range, that it cannot easily estimate all the consequences of actions, and is liable to constant mistakes whenever it makes the attempt. The process would often prove a long and perplexing one, when perhaps, in many cases, a prompt and im-

mediate decision would be requisite.——(2) This doctrine is not extensive enough, as it would not embrace and lay the foundation of moral conduct in all classes of men. There are some men, who do not believe in a future state; and there are thousands and hundreds of thousands, including those who live in heathen as well as in Christian lands, who, if they believe in a future existence, do not believe in a future retribution. Of course, if, in judging of the morality of actions, they are governed solely by their good or evil results, their rule of right must be the good or happiness of the present state of being; and they themselves must be the judges of what this happiness consists in. Their rule of action, therefore, necessarily resolves itself into the expediencies of this short life. But it must be very evident, that the influence of such a system would be evil beyond expression. It would soon involve the whole world in iniquity, confusion, and turmoil. And how unreasonable it is to suppose, since it is allowed, that no man is exempt from the discharge of his duty, that God should have made such feeble and defective provision for impulses and obligations of a moral nature.

(3) Good and evil results of actions may be regarded in the light of rewards and punishments. But certainly it seems evident, that rewards and punishments, so far from constituting obligation, presuppose it as already existing. "Rewards and punishments, says an able and cautious writer, suppose in the very idea of them, moral obligation, and are founded upon it. They do not *make* it, but *enforce* it, or furnish additional motives to comply with it. They are the *sanctions* of virtue, and not its *efficients*. A reward supposes something done to *deserve* it, or a conformity to *obligations subsisting previously to it*; and punishment is always inflicted on account of some breach of obligation. Were we under no obligations, antecedently to the proposal of rewards and punishments, and independently of them, it would be very absurd to propose

them, and a contradiction to suppose us subjects capable of them." *

§. 457. *Feelings of obligation founded on the acts of the conscience.*

In view, therefore, of what has been said, we come to the conclusion, that the feelings of obligation, as no other basis of them is discoverable, are founded on the dictates of an enlightened CONSCIENCE ; and that they find their origin no where else. In other words, in the economy of the mind, the emotions of approval and disapproval, which are appropriately attributed to the conscience, precede, and lay the foundation of feelings of a morally obligatory nature. And as the constitution of the mind lays itself open in this respect, we cannot fail to see how perfect and admirable it is. The senses furnish knowledge, in the first instance ; then the reasoning power is brought into action: moral emotions arise in view of the various objects, that are brought before the contemplation of the intellect: and these last, occupying a high and sacred place in the interiour of our nature, are followed by feelings of obligation, which, finding a still more elevated position in the sanctuary of the mind, constitute the noblest and often the most efficacious motive, that can be presented to the human volition. What a combination of powers, operating harmoniously in their support and guidance of each other ; and securing the intelligence, freedom, accountability, and virtue of man! And with what propriety can the doctrine of Scripture be asserted and enforced, that man, by means of the principles of his own constitution, is a law to himself ; being fully furnished, by the operation of his various susceptibilities, with the grounds of approval & disapproval, of condemnation and acquital, of degradation and glory !

* Price's Review of Questions in Morals, 2d Lond. Ed. p, 178.

CHAPTER THIRD.

NATURE OF RIGHT OR VIRTUE.

§. 458. *Origin of ideas of right and wrong.*

Having emotions of moral approval and disapproval, and feelings of obligation following from them, a foundation is thereby laid for the origin of those abstract conceptions or ideas, which are denominated right and wrong; and are otherwise expressed by such terms as rectitude and guilt, virtue and vice. It is hardly necessary to suggest, that these abstract ideas do not in themselves involve any thing like emotion, or desire, or any other modification of mere sensibility. The notions, which men form of right and its opposite, are purely intellectual; they are the creations of the Understanding; and are entirely different from any sentient states of the mind, although there is a close connection in this particular, that the various moral feelings furnish the *occasions* of their existence. More properly belonging to the head than the heart, to the Intellect than the Sensibility, they are introduced here, merely in consequence of this close and essential connection. Although they are properly regarded as the spontaneous and original creations of the INTELLECT, in the exercise of its power of Suggestion, it is very obvious, that they never could have existed, independently of the antecedent existence of moral emotions and feelings of obligation.

How is it possible, that a being, who has never experienced in himself any moral approbation or disapprobation of the conduct of others, and has never felt the impulse of a moral obligation regulating his own conduct, should know any thing of virtue? That high idea, which seems placed in the midst of the mind's choicest thoughts as a luminous point of attraction and guidance, must be altogether beyond his reach. It is the emotions and dictates of conscience, therefore, and the kindred feelings of obligation, which lay a broad and deep foundation for the notions of rectitude and iniquity, virtue and vice; and it may be added, that no man living is without them. If it be true,as it undoubtedly is, that they are the spontaneous and primitive creations of the understanding or intellectual constitution of man, like the notions of existence, identity, duration, intelligence, design, power, &c, it is equally clear, that the foundation or occasion of them is to be sought in our sentient nature. And this circumstance will sufficiently explain, why the examination of them was not attempted in a former part of the work, but was deferred till the present time.

§. 459. *Of the nature of these ideas.*

The ideas of right and wrong, (what we otherwise express by the terms virtue and vice,) are simple, and like all other simple ideas are undefinable. It is true that various attempts at a definition have been made, but it is no exaggeration to say, that they neither silence inquiry, nor give satisfaction. But we are not necessarily ignorant of their nature, because that nature is not susceptible of being made known by a mere verbal expression. We have the same methods of ascertaining that nature, as we have in a multitude of other analogous cases ; the appeal to internal examination, the inward feeling, the testimony of consciousness. If a man knows what red or white is; what sweet or sour or bitter is ; what power or benevolence or intelligence or hope or sorrow is; he may possess a knowledge in the same way, and in the same degree, of

what right or wrong is. They stand essentially upon the same footing; beyond definition, but still fully ascertained by each one's own experience and consciousness.

§. 460. *Of the immutable distinction between them.*

If we have the ideas of right and wrong, and these ideas are simple, then right and wrong exist. The human mind, in its unbiassed action, and especially in the product of elementary and fundamental truths, may be fully relied on. Simple and elementary ideas are never chimerical; they always have their counterpart; that is to say, something really corresponding to them. There is as much evidence of the existence of right and wrong, as there is of the reality of benevolence, truth, wisdom, or goodness. The mind itself ascertains the nature, and proves the existence in all these cases.

Ascertaining in this way the reality of right and wrong, or what we conceive to be the same thing, of virtue and vice, we are now prepared to assert, that there is a fixed and immutable difference between them. As the mind, which originates these notions, assigns to each a distinctive character, it necessarily recognizes and establishes the fact of this difference. For if there is a difference in the mental conceptions, and those conceptions are not falsities, then there is necessarily a difference in the things or objects themselves, of which the conceptions are representative. If it be certain, that there can be no simple ideas, without something corresponding to them, it is equally certain, that they are not interchangeable. Whatever we perceive or feel to exist, which is elementary and simple, we never can perceive or feel to exist otherwise than it is. Accordingly if we perceive objects to be different from each other at the present time, we never can conceive, while that difference remains, of their being identical.

A change in what is simple is either by diminution, which is necessarily a blotting out or annihilation of the thing itself; or by combination, which either, on the one

hand, results in some new object, or on the other, leaves the elementary parts the same as ever. If then the ideas of right and wrong have an original and distinctive character and are simple, is it possible that we should conceive of their being identified, any more than we can conceive of the identity of red and white, of bitter and sweet, of a square and a circle, of a triangle and a hexagon, or of any other things in nature, which have permanent and distinctive traits. It is with confidence, therefore, that we assert the immutability of moral distinctions, the difference between moral right and wrong, virtue and vice, rectitude and crime. It is not possible for the human mind to form a conception of the opposite; that is to say, the identification or interchange of their nature. Whatever, therefore, is right to-day, is right to-morrow, next day, next year, and forever; and whatever is wrong, continues to be so through all time and all eternity.

§. 461. *Views of Dr. Price on the immutability of moral distinctions.*

"Right and wrong, (says a learned writer, whom we have already had occasion to refer to,) denote what actions *are*. Now whatever any thing is, that it is not by will, or decree, or power, but by *nature and necessity*. Whatever a triangle or circle is, that it is unchangeably and eternally. It depends upon no will or power, whether the three angles of a triangle and two right ones shall be *equal*; whether the periphery of a circle and its diameter shall be *incommensurable*; or whether matter shall be *divisible*, *moveable*, *passive*, and *inert*. Every object of the understanding has an indivisible and invariable essence; from whence arise its properties, and numberless truths concerning it. And the command, which Omnipotence has over things, is not to alter their abstract natures, or to destroy necessary truth; for this is contradictory, and would infer the destruction of all reason, wisdom, and knowledge. But the true idea of Omnipotence is an absolute command over all *particular*, *external* existences, to create or destroy them, or produce any possible changes

among them.——The natures of things then being immutable, whatever we suppose the natures of actions to be, that they must be immutably. If they are indifferent, this indifference is itself immutable, and there neither is nor can be any one thing that, *in reality*, we *ought* to do rather than another. The same is to be said of right and wrong, moral good and evil, as far as they express *real characters* of actions. They must immutably, and necessarily, belong to those actions, of which they are *truly* affirmed.

No will, therefore, can render *any thing* good and obligatory, which was not so antecedently, and from eternity; or any action right, that is not so in itself; meaning by *action*, here, not the bare external effect produced; but the ultimate principle or rule of conduct, or the determination of a reasonable being, considered as accompanied with and arising from the perception of some motives and reasons, and intended for some end." *

§. 462. *Further illustrations of the same subject.*

Another valuable writer of our own country expresses his views, on this important subject, as follows. †

"The rectitude of actions does not depend on their proceeding from one being or another; but on their coincidence with the immutable principles of virtue. Almost all men think, with good reason, that they speak honourably of the Supreme Being, when they say, that all his measures are taken because they are right. Now this language implies, that there is, independent of all will, such a thing as right and wrong. If I say of the vernal forest, it is *green*, or of the sun, it is *luminous*, I assert nothing, unless I affix some ideas to those epithets.

The immutable principles of morality necessarily result, we believe, from the nature of things, and from the relation, which they have one to another. As God is the author of all things, the relation, subsisting between them, may be considered as depending on Him. But

* Price's Review of Moral Questions, p. 37. † President Appleton's Addresses, p. 103.

while objects continue, in all respects, as they are, no change can be produced in their relations. A figure, which is now a square, may be turned into a circle. But while it continues a square, it must have the relations of such a figure. Now, it is just as absurd to ascribe to Deity the power of changing vice into virtue, or virtue into vice, as to speak of his giving to a globe, so continuing, the properties and relations of a cube; or to speak of his making a whole, which is less than the sum of all its parts."

§. 463. *Right and wrong involve a standard or rule of action.*

It follows, therefore, that the doctrine of eternal and necessary right and wrong, virtue and vice, involves the ultimate and paramount rule of human actions. If there is such a thing as immutable right, it is impossible, that the character of human actions should be indifferent. There is a law held over them, expansive as creation, and lasting as eternity. It is not an object of the senses, but of the mind. We cannot see it, nor touch it; we cannot define its shape, nor designate its locality. And thus it is like the Deity himself, present but invisible; silent but always operative; emanating from the centre of the universe, but pervading its utmost limits. But shall we say, that we grope about in darkness, and cannot find it? It is not so. The feeling of obligation tells us when and where to approach it; and conscience, the vicegerent of the Deity in the heart, blesses every coincidence with its smile, and reproves every delinquency with its frown. Let us never imagine, that the law of rectitude, that the authority of virtue is a great way off, because we cannot behold it. The air we breathe is not more diffusive, and not more present. The powerful language of Scripture will apply here. "Say not in thine heart, who shall ascend into heaven, to bring it down from above, or who shall descend into the deep to bring it up from the dead; the word is nigh thee, even in thy mouth, and in thy heart."

W.M.